THE

COMMERCIAL REVIEW.

Volume IV. NOVEMBER, 1847. No. 3.

Art. I.—STATISTICS OF SOUTHERN SLAVE POPULATION.

WITH ESPECIAL REFERENCE TO LIFE INSURANCE.

My communication in the May Number of your Review on "LIFE INSURANCE AT THE SOUTH," had reference only to the white population.* I now, in compliance with your request, give you a few remarks on the value of life among the colored population, which is becoming a very important subject for consideration. My time is much occupied with yellow fever, and I might very fairly claim indulgence for the hasty and imperfect manner in which I am performing my task; but I may, with still more propriety, offer as an excuse a deficiency of material, from the universal neglect of VITAL STATISTICS in the United States. We have already seen that there is by no means a redundancy of information as regards the whites; but the neglect, North and South, of statistics of blacks, is positively disreputable in this enlightened epoch.

Though there is a want of data, by which we can fix with accuracy the value of life among the colored population, there are still sufficient to show that insurance companies are going into this branch of their business pell-mell, without knowing anything of the probabilities. If I can bring them to a halt, and give a better direction to this part of the investigation, it is all I can now hope.

No one can be more fully alive than myself to the vast importance of insurance on negroes, to the South; yet, though I may be severely censured by some, I shall express myself freely without regard to the opinions of others, as I believe the truth alone can be beneficial on the whole. If risks on this class were taken alone by joint stock companies, formed of heavy capitalists who were disposed to gamble on the chances, I should have no objection to see a course of experiments which might lead to a discovery of the true value of life among the colored population; but it should not be forgotten that the life insurance companies now preferred are the *Mutual*, and that unless all the risks work well, the interest of every individual must be jeoparded,

* The article to which our friend Dr. Nott adverts, was a very valuable and interesting communication which should be read and studied by every insurance company and agency in the Union. It occupies a large space in the volume, and abounds with the most valuable statistics of life and mortality to be had in the Southern States. Dr. Nott will continue these valuable papers; and it is our purpose to aid him by the collection of material at the North wherever it can be had. These subjects are entirely new among us, and their full and elaborate discussion is very much a question of American interest.—EDITOR.

as *all* are stockholders under this system. Suppose, for example, 1,000 lives are insured in a mutual company, one-half whites, the other colored. If the risks upon the latter are badly selected, upon whom would fall the losses? Not upon the owners of the slaves alone, or rich members of the company, but upon the poor, honest, industrious, and I may add unsuspicious man, who at the end of the year scrapes together a few of his hard-earned dollars to invest in an insurance company, with the hope of saving his wife and children from beggary when he is no longer able to toil for them.

The data given in my former paper go strongly to prove that the acclimated population of our southern sea-ports *are taxed too high* for life insurance, and I hope I shall at least gain credit for honesty of intention if I now express my doubts whether we are taxed enough on the colored population.

The general fact that there is less mortality South than North among the colored class is sufficiently established; but there are no statistics by which the chances of life can be calculated with sufficient accuracy to form the basis of insurance operations in any city in the Union. At the South, vital statistics have been so neglected by local authorities, that, with the exception of Charleston, South Carolina, we are left wholly in the dark, and even here there has been a great deficiency of details. Within the last year or two, however, important improvements have been made in the manner of keeping tables of mortality in Charleston and Mobile, and we may in a few years expect important results.

Though the white and black races stand diametrically opposed to each other as to the influence of climate on health and longevity, and the necessity for so doing is manifest, yet in most cities no attention has been paid to separating the two classes in their bills of mortality. Even in the large cities of the North the bills of mortality are so badly kept, or so concealed from the public, that nothing can be ascertained on this point. I have made repeated but fruitless efforts to procure bills of mortality of the colored population from Baltimore, New York, and Boston. I have, however, been fortunate enough, through the kindness of Dr. G. Emerson (who has taken the trouble to ransack the records for me), to procure the bills of Philadelphia for 20 years.

I am really at a loss how to account for the silence of Boston on this subject. The statistics of that city, embracing everything which the statesman, physician, or philanthropist could ask, as births, marriages, deaths, sexes, occupations, ages, diseases, manufactures, etc., etc., are all given with admirable system and detail annually, and yet no allusion whatever is made to the mortality of the colored. I have before me the census for each year since 1840, and the last of them, viz., for 1845, is accompanied by a long and able report by Dr. Shattuck on vital statistics, making altogether an octavo volume of 300 pages, and yet not a fact can be found bearing on our subject. Can it be that the mortality of the colored population is concealed on account of its connection with the question of abolition? When I see the intelligence with which these statistics have been conceived and executed—when I see that these details were once carefully kept, and then of late years abandoned—and when I reflect on the improb-

ability of the importance of such facts being overlooked in a city like Boston, I cannot help indulging such a suspicion.*

I have on a former occasion, in the Southern Quarterly Review, discussed at some length the question of the unity of the races, and shall not here open that question again; but no one at all familiar with the past history of the negro and his present peculiarities, can entertain a doubt that he is now very widely separated, both in *physique* and *morale*, from the white man, and that it would require a combination of circumstances not likely to occur, and a long series of years, to bring him up to the Caucasian standard.

The extreme antiquity of Egypt as a civilized nation, taught by Champollion, Young, Vyse, Birch, and others, has not only been confirmed by the recent important discoveries of Baron Bunsen and Lepsius, but these gentlemen have fixed beyond dispute the epoch of Menes, the first king of Egypt, at more than 3600 years before Christ. It is equally well settled by the monumental history of that country, that the negroes existed at that early day with all the physical characteristics they now possess, and that they were treated and spoken of as slaves and barbarians. No one familiar with this discussion, will question these statements, and I think we may conclude that if the Negro has never, in the course of 5,000 years, been thrown into a position to develop his equality, we have no right to expect any great advance in the next few hundred years. The good old Bishop of Blois (H. Grègoire), in his work on the "Literature of Negroes," after exhausting the history of the past, has only been able to collect a few examples who had attained a certain degree of proficiency in the literature of the whites; but not one of them can bear comparison with the better specimens of the Caucasian race; and all attempts made in the present century at bettering the condition of the slaves have but added to their ignorance and unhappiness.

But, passing by the physical history of the negro in the old world, I shall confine myself to the influence of climate as exhibited in this country over this race, so far as it is connected with the subject of life insurance.

All testimony combines to establish the fact, that cold climates are most unfavorable to the health and longevity of the blacks; and as some of our readers may not be familiar with vital statistics, I will precede those of the colored class by tables, showing the mortality among the whites in various parts of the world, which may serve for comparison. The deaths from recent and authentic tables, were as follows:

STATISTICS OF MORTALITY—AVERAGE FOR ONE YEAR.

Boston	1 in 47	London	1 in 37
Philadelphia	1 in 42	Birmingham	1 in 36
England	1 in 45	Sheffield	1 in 32
France	1 in 42	Leeds	1 in 37
Austria	1 in 33	Bristol	1 in 32
Prussia	1 in 38	Manchester	1 in 29
Russia	1 in 38	Liverpool	1 in 28

I have not been able to get any tables from the towns in Canada,

* We should be greatly obliged to Dr. Shattuck for any information in these matters it may be in his power to give. This is a matter of universal interest.—Ed.

showing the mortality of the negroes. Rankin, in his "Visit to Sierra Leone," informs us, that the negroes who deserted their masters during the Revolutionary war, and joined the British army, were afterward colonized in Nova Scotia, but finding it impossible to stand the climate, they were removed to the colony in Africa by the British government. They there, in their state of liberty, showed their constitutional indolence and improvidence, and most of them have had the good fortune to be kidnapped and sold back to the United States. If I recollect correctly, Rankin states, that of 1,100 taken to Sierra Leone, but about 600 of them and their descendants remained at the end of thirty years.

As before stated, I have been unable to procure from Boston and New York tables exhibiting the mortality of the negroes for late years, but I have so often seen it stated at 1 in 15, and 1 in 18 respectively, that I presume, these figures may be assumed as substantially correct.*

Philadelphia may be placed intermediate in point of climate between the extremes of heat and cold in the United States, and we should accordingly expect to find here an intermediate mortality in this class. The tables below (furnished me by Dr. G. Emerson), when placed beside those of Charleston and Boston, will confirm such a result. As the climate on the gulf approaches still more closely that of the tropic, it is not improbable that the longevity of the blacks is still greater (as it certainly is of mulattoes) here, than in the city of Charleston. The tables of mortality for Charleston and Philadelphia are as follows:

MORTALITY OF CHARLESTON.

Years.	Whites.	Blacks.		Years.	Whites.	Blacks.	
1830	1 in 39.4	40.0		1838	1 in 18.3	33.0	Y. Fever.
1831	1 in 46.6	37.9		1839	1 in 29.9	39.0	"
1832	1 in 51.9	55.3		1840	1 in 50.7	46.6	
1833	1 in 55.0	55.7		1841	1 in 65.1	44.8	
1834	1 in 42.1	44.1	Y. Fever.	1842	1 in 50.3	47.8	
1835	1 in 43.1	46.4	"	1843	1 in 60.8	32.9	
1836	1 in 40.6	19.6	Cholera.	1844	1 in 69.3	43.3	
1837	1 in 47.3	46.7		1845	1 in 52.9	48.5	

MORTALITY OF PHILADELPHIA.

Years.	Blacks.	Years.	Whites.	Blacks.
1821	1 in 16.9	1831	1 in 39.6	33.6
1822	1 in 21.5	1832	1 in 28.8	22.6
1823	1 in 17.5	1833	1 in 47.3	35.2
1824	1 in 17.5	1834	1 in 41.4	33.3
1825	1 in 27.0	1835	1 in 38.3	31.2
1826	1 in 26.1	1836	1 in 43.8	21.4
1827	1 in 18.9	1837	1 in 45.1	32.7
1828	1 in 20.8	1838	1 in 45.0	29.2
1829	1 in 23.7	1839	1 in 49.4	31.3
1830	1 in 27.2	1840	1 in 52.2	38.6

It appears from the above tables, that the average mortality in Philadelphia, among the colored population, was 1 in 26, and in Charleston, 1 in 44. Certainly a very marked contrast, and there can be no doubt, that, could the free colored be separated from the slaves,

* If there is any one who has information to the contrary, we would gladly welcome the facts.—Ed.

the latter in Charleston would show a still more favorable result.* There is a considerable number of mulattoes, and free colored in Charleston. The mortality in Philadelphia has been decreasing among both whites and colored, no doubt from the improved condition of the city.

I have marked above the years in which Yellow Fever prevailed in Charleston, and it will be seen that the mortality in those years among the negroes was lower than among the whites, on account of their exemption from this disease. In my former article, I gave evidence of the fact, that the mortality from this disease falls on the *unacclimated whites.*

I have given in the above tables the mortality of whites and blacks together, in each city, in order to contrast the influence of climate on the races. The greatest mortality ever known in Charleston, in the colored class, was in 1836, when it was raised by the Cholera to 1 in 19—more than double the average; but even Cholera and Slavery combined, here, are far less destructive to the negro, than liberty and climate in Boston, where the mortality is said to average 1 in 15.

To arrive at a fair estimate of the mortality of this class in northern and southern cities, we must take into consideration, not only the influence of climate, but social condition also. The negro, is by nature indolent and improvident, everywhere and under all climates; and has nowhere in a state of freedom shown a high degree of longevity, or prolificacy, though by nature the longest lived, I believe, of all the human family. These facts should not be overlooked in estimating their mortality at the North, where they are enjoying all the abstract delights of liberty. In the West Indies, we have a strong illustration of the effect of emancipation, and in their native state, in Africa, the average longevity of the blacks (as in all barbarous nations) will be less than among our slaves. In our northern States, where they, to a great extent, fail to provide against the severe winters, the diseases arising from cold and want must add much to their misery and mortality.

History cannot point to any epoch, or spot on the earth, where the condition of the negro race, either physical or moral, has been at all comparable with that of the slaves of the United States. Mr. Lyell, who seems to have reflected much and honestly on the evils of slavery, during his last visit to this country, expressed to me decidedly his conviction, that the negroes could only be civilized through slavery. They are here brought into forced contact with a civilized race, from whom they imbibe new and more enlarged ideas—they are taught a rational religion—many learn to read and write—all are taught the agricultural, or mechanic arts, or some other useful employment—they not only become more intellectual, but improve in physical appearance; and if they are capable of civilization at all, they are thus admirably prepared for a farther advance. Their progress has certainly been infinitely more rapid than it could have been

* We have the authority of Dr. Niles, then a citizen of New York (now of Paris), in a pamphlet published by him in 1827, for giving the mortality of Baltimore in 1823-24-25, as follows—Whites, 1 in 44; free blacks, 1 in 32; slaves 1 in 77-8. This result is probably attributable to two causes—1st, there is a large proportion of mulattoes among the free colored; 2d, the physical wants of the slaves are better supplied, and they are infinitely more cheerful and happy than the free colored.

under any missionary or colonial system. Mr. Lyell thinks, from all this, that they may be brought up to the Caucasian standard, but if he will live among them as I have, and study well their history, from the palmy days of Egypt down, he will find abundant reason to change this opinion. The races of men, like animals in a wild, uncultivated state, may, if docile, be tamed, educated and vastly improved, but there are limits set to each by nature, beyond which no advance can be made. Although there may be an occasional example where a negro will show a degree of intelligence and capacity for improvement beyond the mass, yet no negro has ever left behind him any intellectual effort worthy of being preserved. The negro is naturally mild and docile; the Indian, on the contrary, is an untamable, carnivorous animal, which is fading away before civilization, in spite of the efforts of missionaries. Can any man who knows anything about the present condition of the Indians and their past history, propose a seheme for their improvement, which would offer the least prospect of success—the race must soon be extinct—even the pure blood Mexicans, who I have no question are a different race from the aboriginal savage, are going down in darkness to their long home.*

The negro will reach, I may say *has* reached, his highest degree of civilization, and emancipation has so far only proved what I think is inevitable, that when removed from compulsion he relapses into barbarism. The Indian can be made to do nothing "on compulsion"—he would rather die than be a slave.

When a race (as the negroes) has had possession of a continent for at least 5,000 years, and no monument stands to designate a single civilized spot—when we see that it held constant intercourse with Egypt in her glory—when, too, we see the result of all recent experiments of abolitionists—I think we may safely conclude, that the negro attains his greatest perfection, physical and moral, and also his greatest longevity, in a state of slavery. The single fact of the longevity of the colored class in Charleston is a very significant one, and should be pondered on by the philanthropist. The colored population of this city show, not only a lower ratio of mortality than any laboring class of any country, but a lower mortality than the aggregate population (including nobility and all) of any country in Europe, except England, with which it is about on a par, and would surpass even England were the slaves taken separate from the free colored. The mortality of the aggregate colored population of Charleston now is less than that of the aggregate of any *town* in Europe.

That the negro, even when placed under the most favorable circumstances, as to physical wants, &c., is unfavorably affected by cold climates, is a fact which admits of no dispute. All the hospital practitioners of the Northern cities must acknowledge the fact. So sensitive are they to cold, and so little are they affected by that fell-destroyer of the white race, *malaria*, which kills more than war and famine, that they suffer in the Southern States more from diseases of winter than those of summer. They are, I am informed, exempt

* The Peruvian and Mexican, the most civilized races found in America, had smaller heads than the savage tribes. How did their heads get smaller by cultivating their intellects, if they are the same race with the latter? This is a question I should like to see solved.

from the violent congestive fevers of our interior districts, and other violent forms of marsh fever; and so exempt are they from yellow fever, that I am now attending my first case of this disease in a full-blooded negro. In fact, it would seem that the negro blood is an antidote against yellow fever, for the smallest admixture of it with the white will protect against this disease, even though the subject come from a healthy northern latitude, in the midst of an epidemic. There are some exceptions, but they are rare. I will not fatigue the reader by an elaborate comparison of the diseases of the two races, as influenced by climate, but will allude to a single one—consumption.

In Charleston they have but recently commenced separating the white and colored population in their bills of mortality, with full details, and I have the deaths from consumption in the latter class for but one year, viz.: 1846; but the ratio of deaths from this disease is so uniform, that it fluctuates but little when undisturbed by epidemic diseases. In Charleston the deaths from consumption in 1846 were 1 in 7 of all the deaths; and in Mobile the average for the three years 1844–'45–'46, the ratio was 1 in 8, in the colored population.

The following extract is from the "New York Medical and Surgical Reporter," February 27, 1847:

"*Colored Home.*—The report of the resident physician, James D. Fitch, M. D., for the year ending 1st January, 1847, is just published. By the tabular account of the inmates during that time, which specifies the sex, age, history and diseases of all who have come under the supervision of Dr. Fitch, we find that the total number in charge, during the year, was 464, and the number of deaths, 89. * * * The disease most prominent is consumption, by which more than one-half of the deaths have been caused, the number being 47," &c.

Now, how near this astounding mortality from consumption may be to the general result of other years in New York and Boston, I have not the data to determine. I can only say, that I have no disposition to plead one side, but, on the contrary, would be very glad if some gentleman of the North would give me, or the public, all the information possible. Why do they not give us the facts fully?

The combined influence of climate and social condition is again illustrated by the comparative increase of the colored class North and South. It has been already stated, that the *whole* population of Philadelphia, including white and colored, in the decennial period from 1830 to 1840, increased 35 per cent., while the colored, taken alone, shows an increase of but 18 per cent. From the constant escape of negroes from the slave States, and the protection offered them in Philadelphia, we should have expected a different result. I will here introduce an extract, bearing on this point, from my article in the Southern Quarterly Review, January, 1846, on the Unity of the Human Race.

It occurred to me that one of the best methods of testing the influence of climate on the negro race, would be to ascertain the relative proportion of children, in different States, to the free colored women between 15 and 45 years (the fruitful age). I have accordingly constructed the following table from the census of 1840, in which is given all the free colored children under 10 years, and the colored females as near as possible. The census gives the free colored females between 10 and 24, between 24 and 36, and between

36 and 55. I have, therefore, taken half of the aggregate of the first and last, and added this amount to the whole of those between 24 and 36, which must give a sufficiently near approximation to the truth.

I have, in the fourth column of the table, placed the per centage of excess or deficiency of children compared with the females; and the excess or deficiency in each State is expressed by placing the sign *plus* or *minus* before the number expressing the per centage.

I have confined these statistics to the *free* colored population, because they are the most stationary; and similarity of habits and other circumstances, render them the fairest test. There are some irregularities in these statistics which are difficult to explain, but if we take the aggregate of sections, or any rational view of the matter, I think they are not unsatisfactory. I give them for what they are worth, hoping they will at least lead the way to other observations.

	Number of free colored women between 15 and 45 years.	Free colored children under 10 years.	Percentage of excess or deficiency of children under 10 compared with the females.		Number of free colored women between 15 and 45 years.	Free colored children under 10 years.	Percentage of excess or deficiency of children under 10 compared with the females.
Maine	280	296	+ 5	Georgia	515	802	+55
New Hampshire	117	107	— 9	Alabama	406	572	+40
Massachusetts	1,782	1,807	+ 1	Mississippi	269	409	+50
Rhode Island	850	673	—26	Louisiana	5,892	8,178	+38
Connecticut	1,836	1,902	+ 3	Tennessee	999	1,854	+95
Vermont	156	167	+ 7	Kentucky	1,276	1,984	+55
New York	12,511	12,040	— 3	Ohio	3,558	5,190	+43
New Jersey	4,374	5,853	+33	Indiana	1,348	2,370	+75
Pennsylvania	11,687	12,509	+ 7	Illinois	696	1,084	+55
Delaware	3,207	5,358	+33	Missouri	298	345	+15
Maryland	13,727	18,548	+35	Florida	177	216	+23
Virginia	10,457	15,857	+53	Arkansas	81	144	+77
North Carolina	5,507	7,666	+39	Michigan	148	173	+17
South Carolina	1,776	2,795	+57	Dist. of Columbia	2,161	2,376	+ 9

The only line which can be drawn across the United States without intersecting States, is one about thirty-six and a half degrees of latitude, which very nearly bounds on the north, North Carolina, Tennessee, and Arkansas. The States of North Carolina, South Carolina, Tennessee, Arkansas, Georgia, Alabama, Mississippi, Louisiana, and Florida, are all south of this line, and the other States all north of it. From the abundance of provisions, the absence of malaria, the protection here given to the colored class, we might reasonably infer that they would be most prosperous and prolific in the northern division. The southern division comprises all the most sickly portions of our country, and the free negroes have less liberty and indulgence than at the North. A calculation made from the above table gives but about 25 per cent. more children than females in the northern division, while in the southern the excess is 44 per cent. The New England States alone show 3 *per cent. less children than females of the child-bearing age.*

By the census of 1800 there were in the New England States, of all ages, 17,317 free colored, and in 1840 there were but 22,633, or an increase only of 5,316 in 40 years! If climate and social condition have nothing to do with this result, I must leave it to others to show what becomes of the natural increase, and of the colored immigrants constantly coming in.

But, had we all the data necessary for fixing the value of life in the pure whites and blacks, another question arises with regard to the longevity of the mixed bloods or *mulattoes*. This question presents many ramifications, which are not only curious, but deeply important to the philanthropist. It has been more fully treated in some of its bearings than I have room for here, in the article alluded to in the Southern Quarterly, and I now shall merely touch it so far as it is connected with the value of life. Whether it be primitive or not, the white and black races are to all intents and purposes *specifically different*, and it is our business now to treat them as we find them in reference to our subject.

A writer in the Boston Medical and Surgical Journal, Nov., 1842, under the signature of "Philanthropist," who seems to be an earnest seeker after truth, uses the following language:

"From authentic statistics and extensive corroborating information, obtained from sources to me of unquestionable authority, together with my own observations, I am led to believe that the following statements are substantially correct:

"1st. That the longevity of the Africans is greater than that of the inhabitants of any other part of the globe.

"2d. That mulattoes, *i. e.*, those born of parents one being African and the other white or Caucasian, are the shortest lived of any class of the human race.

"3d. That the mulattoes are not more liable to die under the age of 25 than the whites or blacks; but from 25 to 40 their deaths are as 10 to 1 of either the whites or blacks between those ages; from 40 to 55, the deaths are as 50 to 1; and from 55 to 70, 100 to 1.

"4th. That the mortality of the free people of color is more than 100 per cent. greater than that of slaves.

"5th. That those of unmixed extraction in the free States are not more liable to sickness or premature death than the whites of their rank and condition in society; but that the striking mortality so manifest among the free people of color, is in every community and section of the country invariably confined to the mulattoes.

"It was remarked by a gentleman from the South, eminent for his intellectual attainments, and distinguished for his correct observation, and who has lived many years in the Southern States, that he did not believe that he had ever seen a mulatto of 70 years of age.

"From a correspondence published in the Boston Spectator, in April last, are taken the following statistics:

"In a colored population of 2,634,348, including free blacks, there are 1,980 over 100 years of age; whereas there are but 647 whites over 100 in a population of 14,581,000.

"In Boston, the number of deaths annually among the colored population is about 1 in 15, and there are fewer pure blacks in this city than any other. The same comparative mortality between mulattoes and blacks exists in the West Indies and in Guiana, where unfavorable social causes do not operate against the mulattoes as in the United States."

Though they do substantially, my observations at the South will not fully corroborate all the above conclusions of "Philanthropist." My belief is that the mulattoes *do* die more than whites or blacks under 25, as they *certainly* do above this age, and that the pure

blacks are destroyed by cold climate as well as the mulattoes, though the latter may be most sensitive.

I will here give the results of my own professional observation during 20 years at the South, which I feel assured time and experience will substantially confirm. The facts were forced upon me during my intercourse with the colored class, and attracted my attention long before I had formed any theory on the subject, and at a time when my convictions were the opposite of what they now are.

1st. The mulattoes are intermediate in intelligence between the blacks and whites.

2d. They are less capable of enduring fatigue, exposure, and hardships of all kinds, than either blacks or whites.

3d. The mulatto women are peculiarly delicate, and more subject to a variety of chronic diseases peculiar to females.

4th. The women are bad breeders and bad nurses—many do not conceive, and most are subject to abortions, or premature births.

5th. The two sexes, when they marry, are less prolific than when crossed on one of the parent stocks.

6th. The specific difference of the races is strongly illustrated in the exemption of the negroes from yellow, and congestive fevers; not only the negro, but the quarteroon, though a native of a cold latitude, is to a great extent exempt; there are occasional exceptions, and it is well known that yellow fever, like cholera, has often been fatal to domestic animals.

The above facts, which I think will in the main hold good in all the Atlantic States, and are more marked the farther north we look, would seem to be contradicted to a considerable extent, if not wholly refuted by an opposite state of things on the Gulf. I hope the contradiction, however, will prove to be only apparent.

The mulattoes, by which I mean all grades of mixture, derived from the early population of Pensacola, Mobile, and New Orleans, and who are a mixture principally of French and Spanish blood with that of the negro, present very different physical characters from the mulattoes seen in the Atlantic States, who are derived mainly from the Anglo-Saxon race. The complexion on the Gulf of the colored creoles (as they are called) is a strong copper, or bronze of different shades, which is agreeable to the eye, and strikingly different from the chalky, sickly hue of the others; they excite at once in the mind the idea of a *new*, or *distinct race*—are well formed, more robust and hardy, and their features often regular and handsome, partaking little of the contour of the negro; they are also much more prolific and long-lived than the mulattoes of the colder States. A stranger coming to Mobile, or New Orleans, could not fail to be forcibly struck by the physical peculiarities of these colored creoles, many of whom resemble so closely certain Mongol tribes, as to give strong support to the suggestion of Dr. S. G. Morton, that the latter *may* possibly be a mixed race of Caucasians and negroes; an idea which will be much strengthened by his remarks on the influence of climate on hybridity. Their hair is often as straight, black, and glossy as that of the Chinese or Indian—the high cheek bone, and obliquity of the eyes is not uncommon. In looking over the well-executed heads in Richards' physical history of man, I can find no type of the colored races of

the *old world*, as the Mongol, Hindoo, Malay, &c., of which I have not seen a good imitation in real life, among the colored creoles of Mobile and New Orleans—but it is remarkable that they show *no resemblance to the aborigines of the new world*—these stand out from the rest of mankind, as Dr. Morton's Crania Americana will show, as boldly as a new and distinct creation.

It is perhaps a difficult task to account for the above differences between these creoles and the mulattoes of colder climates; it is possible that a reason may be found in certain affinities or repulsions of certain races, which fits or unfits them for perfect amalgamation. The population of Germany, France, Spain, Italy, England, Ireland, and Scotland, is such a heterogeneous compound at the present day of aborigines, Celts, Sclavonians, and Germans, that there are now endless disputes as to the original physical character of each of these latter races; and as to the blood which now predominates in each country. The modern Britons, and the Germans, from whom they are principally descended, are usually much more fair in complexion than the French, Spaniards, Italians, Russians, Poles, &c., who, Lawrence and others, maintain, are derived from the Celts, and Slavons, of dark skin, hair and eyes. Explain the fact as we may, it is to my mind evident that negroes amalgamate much better with the dark than the fair races.

When we reflect on the specific differences between the two races (Caucasian and Negro) and the many peculiarities which belong to the mulatto, I think we are justifiable in regarding the latter as a hybrid. I have shown on a former occasion that naturalists have been able to lay down no rule which could offer the slightest objection to this idea. We have shown also that different hybrids are subject to very different laws; some are prolific and others not, &c. Why may it not be a law of the human hybrid, that it is a more delicate, less hardy, and long-lived than the parent stocks? there are facts in natural history which lend support to this idea.

Dr. Morton, the distinguished author of the Crania Americana, and Egyptica, in a paper read last November before the Academy of Natural Sciences in Philadelphia, on "hybridity in animals and plants, considered in reference to the question of the unity of the human species," gives us some interesting facts, which may account more satisfactorily for the distinctive character of the mulattoes North and South. After showing that not only different *species*, but *genera* produce prolific hybrids, he gives facts to prove that climate has much to do with the fecundity of certain hybrids; they may not breed, for example, in a cold climate, but will in a warm one, which is more congenial to their nature. Such would seem to be the case with the mulatto or hybrid offspring of the Caucasian and Negro races; the facts can be clearly established that the mulattoes (the colored creoles at least) of Mobile and New Orleans, are more prolific, more hardy, longer lived, and in every respect a superior race to those of the North. My observations for some years were made on the mulattoes of South Carolina, and even as far South as this, their inferiority is manifest.

The facts and deductions thus far presented would lead very strongly to the conclusion that the black slaves of the South are very

safe risks for insurance; but though fully persuaded of the favorable position of this class, both as to climate and social condition in reference to health and longevity, and though deeply impressed with the importance of this branch of life insurance to the slave States, still I must say that I believe there are yet no data by which the value of these lives can be fixed with sufficient accuracy to justify the thoughtless procedure of some companies.

The mortality among the colored class in Charleston, including blacks, mulattoes, slaves, and free, is 1 in 44 annually; and though this is a more favorable table than can be found in any laboring class in the world, and though even this mortality might be greatly diminished could we separate the free and the hybrids from the black slaves; yet it must be remembered that among the whites it is only the better class that apply for policies; and that the negroes are the laboring class of the South. It is a well-known fact, that as you rise in the scale of society so does the longevity increase, simply because the upper classes are less exposed to the causes of diseases, and can command comforts and prompt medical advice in sickness. The experience too of insurance companies in Europe, shows that there is far less mortality in their selected lives, than in the aggregate population of a nation. It cannot be reasonably expected, then, that the slaves at the South can equal in longevity the better classes of Europe, or the selected lives of insurance companies.

The black slaves, though generally treated with kindness and indulgence, are the laboring class—are exposed much to the causes of disease, and are less protected in sickness than the higher classes; like the man-servant and maid-servant of the free States, they are less cared for in sickness and health than the master and mistress. The longest lived class in England are the nobility; and though poverty in itself may not be a sin, it is not only a disgrace, but tempts many a poor fellow to sell soul and body both.

"Lord lead us not into temptation," is the wisest prayer ever uttered—it contains a profound reflection on human nature. Men are prone to become very good and pious when they get too old to be tempted, and we should therefore pray daily not to be tempted. Life insurance on negroes offers strong temptations to be feared, many of which I have not time to enumerate.

When a company insures the life of a free man, it has the best of all guaranties against foul play, viz.: the innate love of life of the insured party. But on the other hand, we occasionally see at the South unfeeling masters, as we do unfeeling husbands, cruel fathers, and cruel masters to apprentices, in the free States; and such individuals will not show any increase of kindness during sickness, should their interest be opposed to humanity. As long as the negro is sound, and worth more than the amount insured, self-interest will prompt the owner to preserve the life of the slave; but, if the slave become unsound and there is little prospect of perfect recovery, the underwriters cannot expect fair play—the insurance money is worth more than the slave, and the latter is regarded rather in the light of a superannuated horse.

Human nature is the same everywhere, and at all times. See how the English manufacturer coins his guineas out of the exhausted

frames of his wretched operatives—after one set of victims is worked to death, another is at hand ready for the sacrifice. So with the Southern masters, though their slaves, as a general rule, meet with more kindness than any laboring class in the world; yet when it ceases to be the interest of the owner to preserve the life of the slave, he will in many instances cease to be careful of it. Any man who will drive a horse cruelly, will drive a negro or operative to death, if he can gain anything by so doing.

Suppose a thousand slaves to be insured for seven years, and at the end of one, two, three, four, or five years, a portion of them should become unsound, and it is no longer the interest of the owners that they should live out the seven years; would not many be like the Yankee Captain with the insured ship, "damn the old hulk, let her sink—I am safe." That "Almighty Dollar" would soon silence the soft, small voice of humanity.

We have every reason to believe that many unsound negroes would be insured fraudulently, which could be easily done—and it is a singular fact, that the negroes who will nurse the master with untiring devotion and kindness, night and day, are like dogs, utterly regardless of each other's wants in sickness—this is a characteristic in freedom or slavery.

It would be unsafe to insure negroes on plantations in the country, because it is impossible, I fear, to get competent and reliable medical examiners, and for other reasons. Most of the applications would probably be from the towns. It has not been, nor do I think it is likely to become, the custom of masters to insure slaves, except in those instances where they suppose some extraordinary risk to life is incurred, and if such risks alone be taken, the chances must be against the underwriters. I will mention for example the fact, that most of the negroes presented to me for insurance, have been deck-hands of steam-boats, who, besides the danger of being blown up, are exposed to other dangers much greater; at one moment they are employed as firemen, and at the next, they are rolling cotton bales down the river bank at midnight in a cold rain. Many are consequently attacked by pleurisy, and other acute diseases—they are not unfrequently seriously injured by blows from the cotton bales while rolling down the high bluffs, and lastly, they often become intemperate, and contract other bad habits which lead to disturbance of health.

Since the above was printed we have received the following letter from Dr. Nott, which is worthy of attention:

THE SLAVE QUESTION.

Mobile, Sept. 20, 1847.

With what intense anxiety are the eyes of the whole country fixed upon the meeting of our next national assembly? Do we not all feel that we are on the verge of a struggle which must shake the Union to its very foundations? The social position of the negro race, and its influences on the various sections of the country, is to be discussed, and, in my opinion, most of the leaders of public opinion, North and South, are wholly unprepared to meet the great difficulties which complicate this subject; and the facts I have here and on former occasions alluded to, call loudly upon the attention of the statesman, the patriot, and philanthropist. All the reasoning and action of legislators heretofore have been deduced

too much from the history of the Caucasian race, as if the question were settled that the white man and negro are essentially the same, and demand the same course of policy. When we ask for *facts*—for some clear light of experience, drawn from the history of the past, to lead us out of the labyrinth in which fate has placed us—we are answered by the sentimental abstractions of the closet. But, Mr. Editor, these great difficulties cannot be met and overcome by abstractions. We must look to the natural history of the races for light; and I have no hesitation in asserting, that nothing wise—nothing productive of substantial good to the negro race—can be effected without a full knowledge of their physical and intellectual character.

Can humanity look without a shudder upon the reckless impetuosity with which demagogues and fanatics decide great questions like this, involving the lives, fortunes and happiness of millions of human beings, without the slightest knowledge of those facts which are indispensable to the formation of a rational opinion? The angry and senseless discussions on negro emancipation, which have agitated Christendom for the last half century, were commenced in ignorance, and the abolitionists have only become more angry and unreasonable, as facts have risen up against their theories.

It has become evident that this controversy, as now conducted, must lead to consequences fraught with evil both to the white and black races. Is it not time, then, that good and wise men should rise up, inform themselves thoroughly, and, looking the difficulties full in the face, adopt such a course as reason and humanity shall dictate?

The object of the honest abolitionist must certainly be, to better the condition either of the white or black races. How are the whites to be benefited? What the distant future may bring forth, human sagacity cannot foretell; but we know that all great and sudden changes in the policy of a country must be productive of distress; and no one can doubt that emancipation of the Southern slaves would, for a long series of years, be followed by utter destruction of the great staples of the South, and a corresponding destruction of the manufacturing and other interests of the North. It would not stop here; but the older nations who are fed by our commerce would suffer, even more perhaps than ourselves. Should such consequences be hazarded without good and sufficient reasons? But how are the blacks to be benefited by emancipation? This is the great point on which the controversy should turn. Where are we to look for light on this point, either in the history of the past or in the teachings of the present day? Will some abolitionist talk to us sober sense and reason, and demonstrate some plan by which the negro can be made free, prosperous and happy? I am a slave owner, and while on the one hand I shall, in common with the Southern people, resist all encroachments on our constitutional and natural rights, I am, on the other hand, free to say that I am ready to advocate any scheme of emancipation which will insure to the slaves of the South greater happiness than they now enjoy. Every candid and intelligent man, who has examined the facts, must acknowledge that the negroes of the Southern States are infinitely better off than those of Africa, all of whom are the slaves of barbarian chiefs; that they are in a far better condition, morally and physically, and more happy, than those of the free States; that they are in every respect in a better condition than the emancipated blacks of the West Indies; and that African colonization, and the long and painful labors of missionaries, have so far resulted in no good.

Whether the negro be of distinct origin—whether he be a descendant of Adam, changed by the long-continued action of physical causes, or whether the Almighty has, by a direct curse, blackened his skin and clouded his intellect, it is not our intention here to inquire; but it cannot be denied that the negro *now* presents peculiar physical and intellectual characters. We must, therefore, take him as we find him, and for all practical purposes it is immaterial which theory we adopt. The true questions to be decided are—To what position among mankind is he *now* best suited? and, to what position more exalted can time and experience elevate him?

Though many contend that mental cultivation, continued through several generations, may greatly improve a race, no one of our authoritative writers on the natural history of man, whether Christian or Infidel, whether advocating or opposing the unity of the human race, can be found to maintain the intellectual equality of the black and white races.

Experience teaches that none but an intelligent people are fit for any form of government short of an absolute despotism, and it is difficult to imagine how the negro is to be sufficiently enlightened to qualify him for self-government. He

cannot be educated to any extent while a slave, because he becomes unfit for slavery and dangerous to the master. He cannot be liberated and allowed to remain where he now is, because a large population, so indolent, improvident and vicious as free negroes everywhere are, could not be tolerated in any country. Could Alabama, for example, permit her 300,000 slaves to be freed and turned loose within her borders? And I would ask the States north of the Potomac, if they would vote for the emancipation of three millions of slaves, with the "*proviso*," that when liberated they should all settle at the North? I have no doubt that the abolitionists of the North would sooner vote that all the tribes of Africa should be turned over to the devil without benefit of clergy. Self-preservation equally forbids that such an idea should be entertained for the Southern States.

But one scheme, then, can be seriously entertained, viz.: that of colonization, and it is much to be desired that some one would give us a project by which these millions of ignorant, stupid negroes can be successfully colonized, and kept from relapsing (as they are rapidly doing in St. Domingo) into African barbarism. The experiments in colonization, and even the gigantic efforts to suppress the slave-trade, have so far been productive of nothing but evil; and we have every reason to believe, that if the negro *can be* so improved as to qualify him for self-government, a long series of years will be required to effect such a result. The monumental history of Egypt, according to recent researches of Bunsen, Lepsius and other learned hierologists, shows, beyond dispute, that the negro presented the same physical and intellectual characters 5,000 years ago that he does now; and how long, may it be asked, will it take to bring him up to the Caucasian standard? I deny, positively, that there is any evidence in the history of the past, or the experience of our own times, to prove that the brain of a race can be enlarged and the intellect expanded by cultivation through a series of generations. The skulls of the untutored Germans of antiquity—of the Greek peasants—of the ancient Britons, and of the wandering Circassians, who are now bidding defiance to the Emperor of Russia, are as well formed as those of the nobility of England of the present day. Baron Larrey, whose authority will not be questioned in this matter, tells us that the wandering Arabs have the finest formed brains he ever saw. The Caucasian head is always ready formed, and when the spark is applied the intellect blazes forth. Wherever this race is brought under a good government, great men spring up from the very forests. Can any one believe for a moment that the genius of Alexander, Cæsar, Napoleon, Hannibal, Newton, La Place, Cuvier, Shakspeare, &c., is attributable to cultivated ancestry? No—the same blood has been coursing through the veins of the race from Adam down to the present day.

But let us suppose, for a moment, that the negro really is susceptible of progressive improvement. Where is the nation willing to devote the time and money necessary for the perfection of three millions of negroes? Will Old England? No. Will New England? No. They may both be ready to sacrifice both the whites and blacks of the South on the altar of false humanity, but neither will stretch out his hand to offer substantial aid in the cause.

I must bring this hasty letter to a close, but hope I have said enough to make apparent the paramount importance of *negro statistics*. If the blacks are intellectually inferior to the whites—if the whites are deteriorated by amalgamation with the blacks—if the longevity and physical perfection of the mixed race is below that of either of the pure races, and if the negro is by nature unfit for self-government, these are grave matters for consideration. These conclusions I solemnly believe to be true, and that full investigation will only tend to confirm them; and I may add, that my conviction is the result of much personal observation and careful perusal of every work of note on the natural history of man in the French and English languages.

The negroes have attained a greater moral and intellectual elevation—greater physical development and longevity, and incomparably more happiness, in our slave States, than they have ever enjoyed under any other circumstances. Every feeling of humanity, then, and every motive of policy, should bid us handle gently a question of such extreme delicacy. We have yet no light to guide us safely in a change; and as we know that the Southern people are responsible to God alone for their sins, and that it is his hand at last that rules the destinies of nations, it would be better, far, to leave this question to the slow but certain work of time and experience.

Yours, &c.,

JOSIAH C. NOTT, M.D.

PHYSICAL AND MORAL CONDITION OF BLACKS, NORTH AND SOUTH.

BY THE EDITOR.

We have lately taken some pains in examining the reports of 1845, 1846, and 1847, of the *Prison Discipline Association*, kindly furnished us at the office in New York, in the hope of finding statistical information which might be of value in connection with the subject of the above article; but, unfortunately, the same fault may be found with these reports as with all others, that they do not sufficiently discriminate between black and white. However, such facts as we could gather after a search of a thousand pages, we present. They pertain as much to the morals as the longevity of northern negroes.

MORTALITY OF PHILADELPHIA.

Penitentiary.

Years.	Whites, per ct.	Blacks, pr ct.
1830	4.19	0.
1831	4.18	10.02
1832	1.44	13.52
1833	1.11	0.
1834	.8	6.68
1835	1.26	4.61
1836	.99	6.74
1837	3.	6.49
1838	2.92	11.80
1839	.81	4.62
1840	3.88	8.02
1841	1.97	4.61
1842	1.41	9.03
	27.24	86.14
	2.09	6.62

Years.	Whites, per ct.	Blacks, per ct.
1821	2.31	5.92
1822	2.39	4.65
1823	2.96	5.71
1824	2.85	5.71
1825	2.36	3.70
1826	2.48	3.82
1827	2.11	5.29
1828	2.29	4.81
1829	2.27	4.22
1830	2.20	3.68
	24.22	47.51
	2.42	4.75

"It will be perceived," says the Report of 1845 (from which this table is taken), "that these numbers are to each other in the proportion of 1 to 1.96. That is, out of 1,000 of each color, residing in the city, 196 blacks die for every 100 whites; and for every 1,000 of each color in the Penitentiary, the astonishing number of 316 blacks to every 100 whites. Returns from the Philadelphia County Prison, for the last ten years, show that out of 101 deaths in that establishment, 54 died of consumption. Of these, 40 were colored, and 14 white."

In the Weathersfield Penitentiary, from March 1841 to March 1844, the average of deaths was 2.82 for whites, 10.96 for colored. Eastern Penitentiary, Pennsylvania, for three years, ending 1843, 1.85 per cent. deaths, white; 6.63 black. In the Philadelphia prison for ten years, ending 1845, white prisoners, 1,179; black, 1,089; deaths, white, 1 in 46; black, 1 in 12. The whole admission of convicts in the Eastern Penitentiary of Pennsylvania, from October 1829 to December 1845, was 2,054, of which 692 were black, or about one-third! This frightful immorality and crime of the black population will be understood when it is reflected how small a proportion of the population of Pennsylvania, or even of Philadelphia, it embraces. Extraordinary as it may seem, in 1840 very nearly 140 per cent. of the inmates of the same prison were colored! "Perhaps," says Dr. Ginon, the physician in charge, in his report, "the most striking feature is the great disproportion between white and colored deaths—a disproportion that has engaged the attention and sympathy of some of our most enlightened and benevolent citizens, and given rise to various hypotheses. If my experience, &c., justify, I would say, without hesitation, it is *owing entirely to their utter neglect of the necessary means of preserving health, extreme sensuality*, &c. This opinion I believe myself in possession of sufficient facts to substantiate," &c.

In 1845, Mathew L. Bevan, Esq., President of the Eastern Penitentiary of Pennsylvania, adverts again to the subject: "The increase of deaths comes from blacks. This increase of mortality is found in the fact that those colored inmates, from the county of Philadelphia, *are so constitutionally diseased, as under any and all circumstances to be short-lived, from their character and habits.* They die of *constitutional and chronic disorders*, which are *general* among their order, owing to the *privations they undergo, and the want of proper attention in infancy, and their pecu-*

liar mode of living." Mr. Bevan concludes: "*Indulging in the use of ardent spirits, subjected to a prejudice, which bids defiance to any successful attempt to improve their physical or moral condition, from youth to manhood, sowing the seeds of disease in their constitutions, and at last becoming inmates of prisons.*" !!!

These sad and mournful pictures from a city like Philadelphia, where the blacks might be supposed as favorably situated as freedom could make them, are worthy of deep contemplation. If, after a period of so protracted freedom, their condition has, so far from improving, sunk lower and lower, beyond measure lower than in any city where the institution of slavery exists, it would seem full time for blind and raving sentimentality to come to its senses, and let alone what it is incapable of meddling with without mischief. If, however, the "*equality*" of the negroes North, South, and East is the point, *degrade the Southern*, or what is the same thing, as Philadelphia shows, *free them, and you have the desired result.*

We introduce a few more facts from the Prison Discipline Reports. In the New York Penitentiary, 1846, there were 788 whites, 96 blacks, or 1 in 8. The blacks in New York do not exceed, if they equal, 1-50 of the whole population. In the City Prison the blacks were about 20 per cent., or 1 in 5¼. The reader will understand what is the relative proportion of black and white population in the city of New York. At Sing Sing, 1846, there were 854 inmates, of which 193 (1 in 4½) were black. One seventh of the commitments of that year were black. Of the committed, 400 were intemperate—110 being blacks. Number of deaths in prison among blacks, in 1846, were 29—4 being of consumption, and 7 rheumatism.

Dr. Welch, in his report of 1844, says: "It also appears from the records of the State Prison of Connecticut that, since the commencement of the institution in 1828, *half of the deaths have been among the blacks, amounting to* 5.40 *per cent., whites,* 1.07 *per cent.!*" He also refers to the authority of Dr. Nott, of Mobile, in support of his opinion that *the blacks at the North possess* "*less vitality than the whites.*"

We regret that our data at this moment are so incomplete. They, however, present some food for reflection. One might think that our friends and fellow-citizens at the North would have enough to do to look after the condition of their own affairs, instead of troubling themselves with ours. We do not envy them their occupation in either case.

Art. II.—RIVER AND HARBOR IMPROVEMENTS.

THE CHICAGO CONVENTION.

THE proceedings of the great Convention at Chicago last summer of friends to River and Harbor Improvements by the Federal Government have been fully spread before the country, and all who chose to become acquainted with them will have done so ere this article is printed. The grounds of agreement and of difference among those who attended the Convention, though not very clearly defined in the proceedings there had, are tolerably obvious to the practical observer. On the one hand, the bare assemblage of the Convention—especially when we consider how numerously it was attended, from what distances and by what men—affirms the duty of the Federal Government to *do something* in the premises, and the inference can hardly be deemed a forced or far-fetched one if we say that it affirms farther, the duty of doing something *more* than has hitherto been done. For, assuredly, the citizen who believes that our rulers have done and are doing all that is fairly incumbent on them with regard to Rivers and Harbors, will have slender temptation to spend time and money in attending a Convention at a point remote from his residence to consider the subject of River and Harbor Improvements

and memorialize Congress concerning them. For it is not, surely, to be presumed that honorable gentlemen would attend such a gathering with the sole purpose of embarrassing its deliberations and distracting its councils. The fact, then, that some five to eight thousand citizens, including many of the most eminent and the most worthy, many from localities more than a thousand miles distant, convened at Chicago on the 5th of July, 1847, to deliberate and act on the subject already stated, is in itself of decided significance, and the conclusions of a body so constituted can hardly fail to exert a palpable influence on the public sentiment and legislation of the country. These conclusions are clearly and forcibly set forth in the resolutions of the Convention, mainly drawn by Hon. John C. Spencer, but agreed on first by an able committee of two persons from each State and Territory represented—about thirty in all—selected in nearly equal numbers from the two great political parties, and whose unanimous report was affirmed with nearly equal unanimity by the Convention. The resolutions, so drawn and passed, embody an argument in support of the constitutionality and justice of a comprehensive and vigorous prosecution of River and Harbor Improvement which has rarely been excelled, if ever equaled.

On the other hand, it cannot be denied, and need not be disguised, that differences of opinion with regard to the proper extent and limitations of National River and Harbor Improvement were developed at this Convention; and these differences we now propose to consider.

On the side of a liberal and comprehensive appropriation of the public moneys to the improvement of Rivers and Harbors, there appears to be no disagreement, no hesitation. The resolutions of the Convention state the views taken on that side more clearly and forcibly than we could express them in so few words. Briefly, however, it is maintained on that side, that the Federal Government ought to prosecute the improvement, for purposes of commerce, of the harbors which line our coasts (whether seaward or inland), and the more important rivers within our national limits, so fast as the state of its finances will permit, and so far as the common interest and general welfare of the whole people shall seem to demand. But to this end it is not deemed essential that each particular River or Harbor Improvement shall be essential to the well-being of the *entire* people, any more than that each ship-of-war constructed and maintained, or soldier employed and paid by the government, shall have been engaged in the defense of the whole country. In the narrowest view, it may be said that the safe and easy navigation, even of the Mississippi, is of no moment to the people of Vermont; while there is a larger and truer aspect, wherein whatever increases production, diffuses wealth and facilitates intercourse in any section of the Union, is desirable and beneficent to every portion of it. But admit that the rendering navigable, so far as may be, of a single river like the Illinois, or making accessible and safe the single harbor of Chicago, may not be of obvious interest to the whole country; still, the simultaneous improvement of *all* such rivers and harbors, so far as a provident statesmanship and wise economy would justify, may be the clear dictate of national policy and public good. Thus regarded, each single improvement appears but a link in a golden chain

of benefits and blessings, admirably calculated to bind together, indissolubly, the States composing this vast republic.

On the other side, the agreement on any general principle—much less on any clear line of policy—is not obvious, as a brief glance at the indications afforded at Chicago will show. For example—

Col. Benton, by letter, denounces vehemently the proneness to importune Congress to aid in the furtherance of "local or sectional objects;" yet strongly affirms the constitutionality and propriety of a national canal from Lake Michigan to the Mississippi; and, of course, of other works of like character and importance.

Gov. Wright, by letter, has like fears of the diversion of the national funds to objects purely local, but is favorable to harbor improvements at those points "where the convenience and safety of Lake commerce" demand them. River improvements afford to his mind a subject of far greater difficulty; yet he has no doubt at all that appropriations for *some* river improvements are constitutional, while others are not. The line of distinction he indicates, without positively affirming it, is this: "where commerce upon a river already exists, and is regularly carried on in spite of the obstructions sought to be removed," there improvements may be deemed constitutional: in other cases, not. But finally, Mr. W. concedes that "this is not a sufficient dividing line for practical legislation," but he favors us with no other.

Mr. David Dudley Field, of N. Y., in a speech before the Convention, controverted what is termed the "general welfare" or "lax construction" doctrine with regard to internal improvement, and has, since his return, written out his remarks for the Democratic Review, being moved thereto, it appears, by a pressing note from the Editor. Having listened to that speech when delivered, we regret our inability to identify the uttered remarks with the printed essay, and the more that the speech seems to have suffered in cogency without gaining in perspicuity in the transfer from Chicago to New York, and from living breath to inert metal. Mr. Field flatly contradicts Col. Benton with regard to the power of the Federal Government to construct canals; he favors us with long and pains-taking disquisitions on the nature and true character of our government, with very liberal citations from the "resolutions of '98," and many ponderous documents unheard of at Chicago; but when we have read them all we are nearly as much in the dark, as to the kind of a River and Harbor bill that Mr. F. would vote for, as if he had not spoken at the Convention. We hear quite enough of the "difference between one who construes the Constitution strictly, and another who construes it loosely," "enlarging the incidental powers of Congress," &c., &c., but little or nothing that is tangible on the material point. The burden of his speech is this same offensive and supercilious assumption, "We who think as I do are the faithful upholders of the Constitution, which you who differ from us would heedlessly and selfishly override and destroy;" but what projected improvements are constitutional, and what are not, in Mr. F.'s opinion, it were a task indeed to gather from his deliberately written version of his Chicago speech. Now this seems less excusable inasmuch as, while the written speech is much longer than that actually delivered, it

omits all account of the questions put to Mr. F. while speaking (intended to bring his views plainly within the apprehension of his hearers), and his replies thereto, together forming by far the most interesting portions of the whole. He barely states in his printed report, that he was subjected to "interruptions," which were "in bad temper and worse taste," and that he will make no farther allusion to them. Now the interruption of a speaker by questions *is* in bad taste at all times, and we would be the last to excuse it, though in this case no "bad temper" was manifested. But suppose there *had* been—would that have justified the suppression by the speaker of his most pregnant and pointed remarks on the occasion referred to? Have not his readers a natural desire and right to hear how his doctrines bore the ordeal of familiar and practical application? Believing that they have, let us here endeavor to supply from memory the questions put to Mr. F. while speaking, with his responses as given, viz.:

1. *Voice from the Convention.*—Do you deem constitutional an appropriation for improving the Illinois river?
Mr. F.—It runs through *two States*, does it not?
Voice (amid a general shout).—No, only one.
Mr. F.—Then I *do not* consider it constitutional.
2. *Another Voice.*—Do you hold the improvement of the *Hudson* river constitutional?
Mr. F.—*Below a custom-house*, I do.
3. *Another Voice.*—Is an appropriation for Chicago harbor constitutional?
Mr. F.—If there was a harbor here originally, I do; otherwise not.

Such, to the best of our recollection, were the questions by which the stream of Mr. F's eloquence was interrupted, with his replies. Let us consider their bearing on the general subject before us.

All appear to agree, that *some* rivers and harbors may be rendered more practicable for the purposes of commerce, without violence to the Constitution. Mr. Field certainly assents to this, by his bare presence at Chicago, if no otherwise. All agree also, that there is a limit somewhere to the sphere of Constitutional appropriation for these purposes; that, to use Mr. Benton's phrase, "harbors that harbor nothing but the interest of their projectors" are *not* within the sphere referred to. The question which actually divides us, therefore, is one of detail rather than principle—of less or more, rather than of something or nothing. Mr. Field's parade of extracts from the Convention Debates of 1787, and the Virginia and Kentucky Resolutions of '98, seems plainly irrelevant, since he does not deny utterly the power to improve rivers and harbors, until he shall clearly draw the line between appropriations he deems constitutional and unconstitutional respectively. This we find only in the answers to questions so carefully omitted from his reported speech. Let us examine them.

1. A river which runs through two or more States may be constitutionally improved, though the same river if running through one State only, could not be. Is not this distinction arbitrary and without just foundation? Here are the Connecticut and Hudson, running parallel with each other, of nearly equal length, but of very unequal worth and importance. One of them runs through two States, and for a long distance divides two others—is in fact their boundary for

nearly, or quite the entire length of each; while the other commences and completes its course within the territory of a single State. Yet the improvement of the latter has frequently and properly claimed the attention of the Federal Government, its navigation affecting the commerce of half the Union, while the former is of far more limited consequence. Instances might be multiplied of the rule indicated by Mr. F., but can that be needed?

2. So of the Custom-house touchstone. Here is the Passaic, a stream of obviously local character and usefulness, with a Custom-house at Newark, near its mouth. But the people of Paterson, ten miles higher up, naturally desire that ships should be able to reach and discharge at their wharves, and seek national aid for their enterprise. Their first step, if the validity of Mr. F.'s distinction be established, is to procure the passage of an act declaring Paterson a port of entry, whereby one obstacle to their success is removed, though their stream remains what it ever was, of local, not national concern. On the other hand, suppose the Treasury Department shall decide that no public purpose is subserved by the Custom-house establishments at Albany, Pittsburgh, Cincinnati and St. Louis, commensurate with the cost of maintaining them, and thereupon directs their discontinuance—shall that be held to render the improvement of the Hudson, Ohio and Mississippi, henceforth unconstitutional? Would not the national necessity for improving the navigation of those rivers have existed and been palpable, although a Custom-house had never been created above the mouth of either?

3. Equally mistaken seems the criterion intimated by Mr. F. with regard to the constitutionality of Federal expenditure on the harbor at Chicago. Let us suppose there had previously existed half a dozen good harbors on Lake Michigan, so situated as reasonably to accommodate the commerce of that lake, who would seriously contend that an appropriation for Chicago would be constitutional *per se?* But suppose on the other hand (what was the fact), that there was not a single natural harbor on all the coasts of Lake Michigan, six or seven hundred miles in extent, and that the large and rapidly increasing commerce of several States on that lake was exposed to peril and destruction in every storm, and denied the needed facilities for shipping and discharging, can it be doubted by those who believe *any* Harbor Improvements constitutional, that the construction of at least one copious haven on that lake would be so, even though it had to be scraped entirely out of the solid earth? Suppose it were the fact, that the coast presented no indentation whatever, but the gentle, imperceptible curve of a perfect circle from one end to the other—would the circumstance which rendered the construction of a harbor most imperatively necessary, at the same time forbid such construction, at least by the government which has exclusive power over commerce between the States, and exclusive right to derive revenue therefrom? Is it not plain that the rule here indicated by Mr. Field, diminishes the power of the government in direct proportion to the increase of the necessity for its exercise? Let there be a harbor at any important point almost as good by nature as is required, and its improvement by Federal appropriation would be rightful; but let the necessity for such appropriation be absolute and unmitigated,

and the constitutionality of making it is denied! We need hardly say, that the same objection in substance applies to the distinction as to River Improvements taken by Gov. Wright. This may be ever so strict construction, but is it strictly consistent with common sense and the public good?

Let us, in closing, urge upon those on whom, in the approaching Congress, may devolve the duty of framing a River and Harbor bill, to discharge that duty patiently, liberally, justly, and with a single eye to the common good. Let them take care that no item that cannot bear its own weight, however trifling in amount, is allowed to creep in for the sake of securing a vote, or silencing an adversary. Let a bill be framed of which every item *ought to* pass, and we have strong hopes that it *will* pass. It is a deplorable truth, that appropriations for useless or pernicious ends—to construct cumbrous fortresses and needless ships of war—to pay and feed cormorant armies in time of profound peace, or rob an Indian tribe of lands which it needs, and we do not—will pass in a day, with hardly an opponent and never a constitutional scruple; but whenever a dollar is asked for any purpose of positive and enduring beneficence—to promote directly the well-being of our own people, rather than threaten or carry destruction to others—there arises all manner of caviling, hair-splitting, scruple-devising, as if the mere purpose of the measure were *primâ facie* evidence of intent to subvert the Constitution. In the apprehension of a formidable class of Political philosophers, fidelity to the Constitution involves a vigorous adherence to every ledge and sand-bar which presented an abstract to navigation in 1787, and the fate of our institutions is bound up in the preservation of our overslaughs and rapids in rivers otherwise navigable. "Snags, sawyers and the constitution for ever!" is virtually the war-cry of that school of expounders, who never scruple to stigmatize all who differ from them as ready to overthrow every bulwark of our freedom in their reckless pursuit of personal or local aggrandizement. Ought this style of argumentation to pass unrebuked? Can it suffice to overbear the dictates of National progress and Commercial necessity?

H. G.

Art. III.—SUGAR—ITS CULTIVATION, MANUFACTURE, AND COMMERCE.

No. II.

DEFECATION OR CLARIFICATION—ACTION OF LIME AND HEAT—USE OF NUT-GALLS, SULPHATE OF ZINC, ALUM, DIACETATE OF LEAD, ELM BARK, &C.—FILTERS—EVAPORATION—ANIMAL CHARCOAL—CONCENTRATION OF SYRUP—VACUUM PROCESSES—HIGH AND LOW TEMPERATURES—PROOF ACIDS—ALKALINE, ALBUMINOUS SYRUPS—SMEAR—COOLERS—SKIPPING OR STRIKING—POTTING—THEORY OF CRYSTALIZATION—CURING HOUSES—STATISTICS OF SUGAR PLANTATIONS AND RECORDS—CONDITION OF THE BRITISH WEST INDIES—THEIR RELIEF—ABOLITIONISM.

IN our last paper we examined into the physical and chemical con-

stituents of sugar-cane and its various products, the means of extracting the juices by machinery, and the merits of different processes. We now proceed to other heads of our general subject.

Since the issue of the October No. we have received a letter from an intelligent Louisiana sugar planter now in Europe, who contributed to our pages last year an inestimable article upon the manufacture of sugar. In reply to our inquiries, he remarks, "I have notes in Paris of value, comprising references to what I have read, and statements of what I have seen and heard on a subject so interesting to me as the sugar culture and manufacture, and have collected everything of any value that has ever been published on the subject. I think I shall be able to give you, on my return, another article on sugar, which will interest our planters."

We also received from Mr. Valcour Aime, one of our most liberal and extensive planters, an interesting letter, which we are sure, in so good a cause, he will excuse us for making public. It will be found in one of the latter pages of this Number.

But we resume our labors, making, as in our last paper, the valuable work of Dr. Evans, of London, the basis of observations. It is the latest scientific treatise upon the subject, and important, as giving the results on the English plantations, and in the manufactories of the metropolis. As these papers proceed, we shall examine the results in all other countries, as well as in our own.

The *defecation*, or *clarification* of cane juice, is the first process after its extraction, though in many of the English colonies it is dispensed with. Where it is conducted, the juice is received from the mill into cisterns, or cold receivers of copper or wood, lined with sheet lead, to remain there until the clarifiers are ready. These receivers are, however, being abandoned, as Dr. Evans tells us, and the juice passes directly to its destination.

The *clarifiers* are shallow copper pans, of circular form—flat, or arched slightly upward at bottom, and capable of containing 250 to 500 gallons. Each is suspended over a different fire-place, supplied with dampers to regulate the combustion of fuel, &c.

When the juice has attained a sufficient temperature, say 140°, lime is applied. It is usually slaked by water; clarified cane-juice or syrup being sometimes previously admixed, it is thought, with good results. The quantity of lime used is regulated by experiment on the juice, in wine glasses, in each of which different quantities of it are introduced.

After this application, the cane-juice is well stirred, and heated gradually to boiling, or until a scum appears upon the top, which cracks and breaks, exposing the clear liquid. The fire is then extinguished, and the juice left "to remain undisturbed until the remaining feculencies have subsided." It is then allowed to pass out into the grand copper receiver. A *double clarification* is sometimes resorted to, one by heat only, and the other with heat and lime. *Filtration* by mechanical means is frequently practised as a previous step.

The action of heat upon cane-juice is to coagulate and render insoluble the vegetable albumen involved with the flocculent particles. That of lime is more difficult of explication. If tried in a glass, it

changes the color to bright yellow, separating the liquid into a precipitate of impurities, and the clear juice.

Lime saturates any free acid it may meet with in the cane-juice; it sets free a small quantity of potash; it forms an insoluble compound with a portion of the caseine, which is either precipitated, or which rises to the surface in the scum; it combines with three times its weight of sugar—the substance produced being very sparingly soluble in cold, and still less so in hot water; it deepens the color of the juice.

When the cane-juice contains a small quantity of lactic and acetic acids, an event which occurs more frequently now than formerly, owing to the want of a sufficiency of labor to hasten the stages of the manufacture, the lime combines with those acids, and forms uncrystalizable salts, which preserve a portion of the sugar with which they may be in contact in a fluid state.

Should a small quantity of glucose be present in the syrup, which is always the case when concentration has been conducted as it now is in the colonies, the lime, probably assisted by a small quantity of potash which has been set free, speedily converts it into glucic acid; and the glucates, when formed by the prolonged action of the heat, are as quickly converted into melasinates of the same bases, and the whole syrup is thus rendered of a dark brown or black color.

Cane-juice, defecated as judiciously as possible by means of lime and the application of heat, throws down a farther precipitate, on the addition of a little diacetate of lead.*

The lime should be as pure as possible—being burnt, and slaked immediately after with boiling water, and strained through a sieve.

Before applying lime, the juice is tested with *litmus* paper, which is changed by it from blue to reddish-purple. At 130° milk of lime is applied, cautiously at first, and then adding to the quantity until no farther reaction upon the litmus is observed. The heat is then applied till perfect ebullition for two or three minutes. If the clarifier contains 300 gallons, the first proportions of lime will be from four to six ounces. If the quantity of lime be not sufficient, the grains will be light and small—if too great, the complexion of the sugar will be darker, but bolder grains. The vessels should always be of copper.

There are other chemical modes of separating sugar from its impurities, each with different degrees of merit and demerit. That by *nut-galls* it is said may be followed to advantage when the juice is viscid, without increased acidity. When the *sulphate of zinc* is used, the defecation is very complete; but being a virulent poison, the process is attended with danger. Twelve ounces are applied to 300 gallons cane-juice, and milk of lime to render neutral. Bag filters are then used for straining. *Alum* possesses great advantages, together with the evil that it leaves sulphate of potash, or nitre, combined with the juice, which is deleterious. The *sulphate of alumina* possesses extraordinary advantages over other chemicals. It leaves the liquor colorless, and the sugar beautiful. It is used in the manufacture of beet-root sugar, in France. The process is thus explained by Dr. Evans:

This substance is employed in the way just described for alum. It does not contain potash, but is composed of alumina and sulphuric acid only. The proportions required are about one pound to every 100 gallons of juice; but twice, or even thrice that quantity may be given with advantage. We must be careful, however, to neutralize the liquor, thus treated, as quickly as possible with milk of lime, otherwise some risk would be incurred of converting a portion of the sugar into glucose. Every pound of the sulphate of alumina will require about

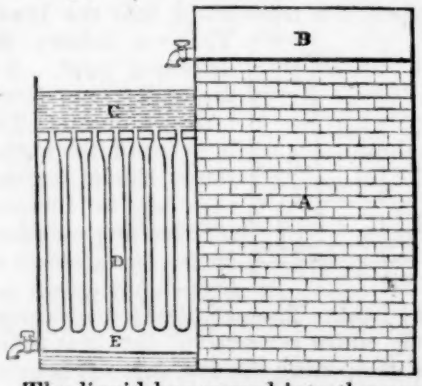
* Evans, pp. 97, 98.

seven or eight ounces of caustic lime to effect its decomposition; but a slightly additional quantity may be given in all cases, beyond what is merely necessary, although the liquor may thereby be rendered slightly alkaline.

Sulphuric acid is advised, either upon juice that is viscid, or, in the technical phrase, which is burnt. *Diacetate of lead* was proposed in England, and a patent taken out for its use some years ago. But a double clarification is necessary, with, of course, loss of time and labor. It was tried in the English colonies, and the resulting sugar, to some extent from mismanagement, produced serious effects upon all who used it. *Wild elm bark* has been successfully resorted to in Martinique and Guadaloupe.

Subsequent *filtration* of cane-juice after its defecation is commended for several reasons—that is, if it has been allowed to boil. 1. Less trouble in regulating temperature. 2. Ebullition, which is essential to the complete coagulation of the albumen. 3. Economy of time, the liquid running immediately after boiling into the filters. 4. The increase in quantity of liquor. 5. Complete separation of solids, and more transparent juice.

Filters which are used for mere mechanical impurities, are strong calico bags, eighteen inches wide, and three to five feet long. These bags are introduced into others of canvas, of the same length, only six inches wide. Tubes then run from the cistern to the mouths of the bags, around which they are tightly closed.



Thus in the annexed diagram, B is the clarifier; C is an upper cistern; D shows the case of filters attached to C; E is a lower cistern, receiving filtered liquor and discharging it into the copper, if possible. If the juice has not been previously filtered, a wire sieve should be placed in C.*

The process of clarification being completed, the next in order is *evaporation*, or reduction to the state of syrup. The liquid has passed into the coppers—hollow spheres—arranged in order on the same surface, and over one fire. This method was used in India from all antiquity. In these coppers the liquid undergoes renewed defecation, evaporation, and concentration, simultaneously. Dr. Evans shows that to do these effectually by this means is impossible, and that injury must arise in some of the processes. The plan would not have been so long retained in the colonies had there been a demand for finer sugars. To remedy its evils, the following modifications and changes are suggested:

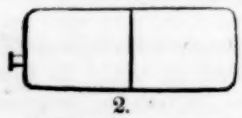
1. Remove the *teche;* place the fire under the second copper; let the four coppers constitute exclusively the evaporating apparatus. The juice passes first into the one most distant from the fire, and successively into the others, being skimmed and ladled until reaching the density required. Pass it then into charcoal filters, or into a cis-

† Evans, p. 111.

tern prepared to receive it, or into the concentrating vessel. This process would not increase the expense of machinery, but megass fuel must be used to pass the flame far enough, and a greater expense of fuel and labor is required.

2. Another modification is proposed. Substitute for the coppers a large, flat-bottomed vessel of cast iron or copper, oblong shape, with angles rounded off, divided into two equal apartments by a metal plate, containing a valve. The flame must come in contact with every part of the bottom, without touching the sides. One man may attend to the skimming, and no ladling is necessary. A large cock, attached to the extremity, allows the syrup to be drawn when sufficiently concentrated.

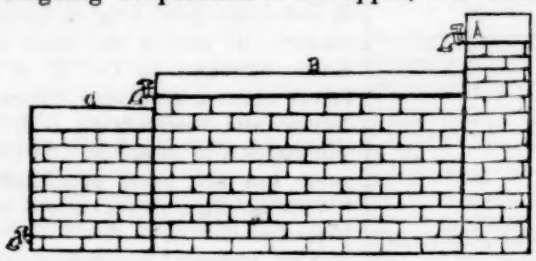
1.



2.

3.

The diagrams show, 1. The outline of the pan. 2. The furnace on which it is hung. 3. The pan, set in mason work. A different arrangement of the evaporating vessel is, however, proposed, as in the diagram below. The apparatus in this instance is two flat-bottomed vessels of iron or copper, so suspended that the upper edge of the lower is on the same elevation as the bottom of the other. The same fire is applied to each. After undergoing evaporation in the upper, it is transmitted into the lower. Thus A admits the defecated juice. B is the upper, and C the lower evaporator. The bottoms of the evaporators should be corrugated, to increase the heating surface. In the manufacture of beet-sugar, steam has been chiefly used for evaporating heat. The only decided advantage which it is said to possess, is the entire removal of the heat when required, without the trouble of dampening the fire, &c. It is by no means economical, from the loss of caloric and consumption of fuel.



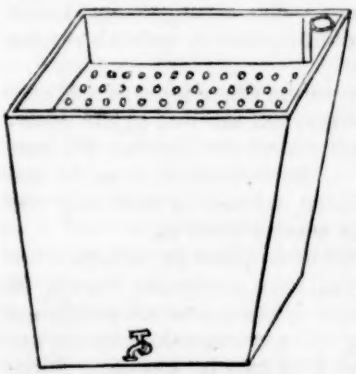
Dr. Evans remarks—Evaporation has for its object the concentration of cane-juice to the consistency of a syrup of that degree of density best suited to the process which it has afterward to undergo. Thus, if the syrup is to be filtered through animal charcoal previously to its concentration into sugar, the density which is best suited for this purpose is 27° or 28° Beaumé; but if this operation is not to be performed, the evaporation may be prolonged until the syrup nas acquired a density of 30° or 32°.

Evaporation of cane-juice is best performed by ebullition at the ordinary atmospheric pressure. That degree of heat, at this stage, during which the sugar is largely diluted, when judiciously applied, so that the syrup may not be exposed to it longer than is absolutely necessary, is always beneficial, and often essentially necessary; for, otherwise, a larger portion of the nitrogenized matters, which have not been entirely removed, would be retained, and the crystalization of the sugar would be less complete.

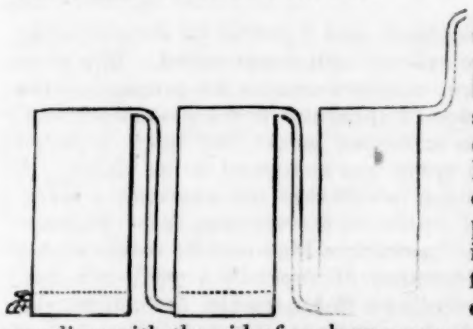
The syrup being furnished in the state we have left it, the producer may elect whether he will have a good, fine article of Museo-

vado, or an altogether superior and valuable product. In the latter case he will resort to *refining through charcoal*. This was first discovered in 1805, and in 1811 *animal charcoal* was found to possess the qualities desired in a much higher degree than vegetable. M. Derosne first applied it in France to sugar. The filters made by M. Dumont are in general use. Animal charcoal discharges the color, renders viscid syrups crystalizable, neutralizes acids, and removes excess of lime. It destroys the bitter and aromatic principles of vegetables, neutralizes poisons, &c. Vegetable charcoal may be made in a considerable degree to possess discoloring properties.

Let 30 lbs. of it, reduced to a fine powder, and then washed carefully in water slightly acidulated with muriatic acid, and afterward with pure water, be mixed with 70 lbs. of clay, in the form of a paste, and the whole be set by to dry; then let it be broken into small pieces, and calcined in a close iron vessel, at a white heat, for two hours. On its withdrawal it must be received in covered iron boxes, out of the contact of the air, or instantly cooled with aspersions of cold water, and reduced into a coarse powder. This forms an excellent substitute for animal charcoal, as it possesses considerable discoloring powers.



The *filter* of M. Dumont is shown in the cut. It is a quadrangular, pyramidal vessel of wood, base uppermost. Its bottom is double, the upper one being basket-work or perforated metal. In the space between the two bottoms is placed a cock, and a metal tube rises from the same chamber. Over the false bottom is spread flannel, and placed powdered moistened charcoal—filling two-thirds of the vessel. Over the charcoal is a perforated cover. The hot syrup being poured in, the air and water, urged by its pressure, ascend the tube and escape. Four filters would be required, of the usual size, to make three hogsheads a day. The charcoal must be revivified in three or four days.



The *Peyron filter* is a different machine, and is applicable to other sugars than beet-root. It consists of a series of cylindrical vessels, each double-bottomed, like Dumont's, hermetically sealed at top. They are closely packed with charcoal, and into the upper part of the first vessel a tube is introduced, to admit syrup, descending with the aid of such pressure as drives it through the charcoal. It then ascends into another vessel, by a pipe, &c., &c., as in the plate. The cylinders are six feet high, and three in diameter. They do rather more work than Dumont's, and act five or six days. When the charcoal is worn, boiling water is

introduced, and by fermentation and effectual washing, it regains its power. The ordinary puncheon is, however, a very good filter.

The fifth chapter of Dr. Evans' valuable and scientific work is employed upon the CONCENTRATION OF SYRUP.

The density of syrups and the relative amount of their constituents will be different, as they are filtered through animal charcoal or not. The temperature of the boiling point in the first instance will be 219 or 220° Fahr.; in the last case 224°—with greater temperature, changes in the composition of the sugar will result.

Sugar being soluble in one-half its weight of cold, and one-fifth its weight of boiling water, boiling syrup, thoroughly saturated, must necessarily deposit, on cooling, three-fifths of its sugar, the remaining two-fifths being held in solution by the water. The temperature required for ebullition, where there is one part of water to five of sugar, ranges from 238 to 248°, and even higher. These temperatures are injurious to sugar, as is shown by the experiments of M. Soubieran. The effects after long application of heat were: 1. Disappearance of cane sugar. 2. Appearance of fruit sugar, or glucose. 3. Production of carbonaceous powder and acids. Examining the refineries of Paris where a low temperature was used *in vacuo*, no such results were marked.

The usual plan of *concentration* being in the first copper, or *teache*, as it is called, has the advantage of rapidity, but the loss in the quantity and quality of sugar thereby, is estimated as high as ten per cent. Experiments have been made in Barbadoes to remedy the evils of intense heat on the *teache*. These consist in reducing the size of the vessel, so that the syrup may sooner leave it.

A more important improvement would be to place the teache over a separate fire, and modify its form, viz., into a circular vessel, 45 inches in diameter, 14 or 15 inches deep—bottom convex within—a cock for drawing off concentrated syrup—the bottom alone to be exposed to the fire. "By these means the heat can be modified without interfering with the evaporation going on in the other vessels, and the bottom alone being exposed to the fire, there is much less danger of charring or burning the sugar than in the method now in use."*

In 1819, Mr. Howard, of England, took a patent for concentrating sugar *in vacuo*, to prevent the evils of high temperature. The principle is that liquids boil at lower temperatures, as the pressure of the atmosphere is removed. Howard's apparatus was a globular vessel, of copper, inclosed in an iron or copper jacket, the space between being filled with steam. The syrup was contained in the vessel. A tube admitted the escape of vapor, which was condensed by a jet of water. An air-pump attached produced the vacuum, &c. This apparatus has been improved by inserting a long coil of steam-piping into the vessel, and the condensation of vapor by a metallic worm. The vacuum vessel or pan requires a thermometer, to indicate the temperature of the liquid, and a barometer, to determine the *degree of vacuum* or exhaustion. The steam-jacket greatly adds to the quantity of heating surface, as also does the steam pipe. The diminished atmospheric pressure increases in similar ratio to the evaporat-

* Evans.

ing power. A fall of 27 inches in the barometer reduces the boiling point of water to 164°. Thus is secured low temperature and rapidity.

Speaking of the application of this invention to the English colonies, Dr. Evans remarks:

Unfortunately its general adoption, that is, its introduction on every estate, will for ever be impossible, in consequence of the great outlay required for the purchase of the apparatus, the skill required for its management, its liability to get out of order, and the necessity of more efficient workmen for its repairs than are as yet to be found in the colonies. The first of these objections is not so applicable to large estates as it is to small ones, as they offer a larger scope for getting the return of an adequate interest on the money so invested; and in such a case the others would be overcome by the necessity which would arise of obtaining that knowledge from abroad which is not to be had at home, were there an urgent demand for its supply.

There can be no doubt that, on those estates which, from their extent and the fortunate position of their owners, will admit of the sinking a capital sufficient to obtain the vacuum apparatus, in conjunction with steam defecating and evaporating vessels, and a powerful and well-constructed mill, the ameliorations which would result, both in the quantity and the quality of the products, obtained under a prudent and intelligent management, would fully compensate the expense incurred; but how few are the estates which at the present time are in such fortunate circumstances!

A plan of concentrating syrup at a low temperature over the open fire, and at the ordinary atmospheric pressure, was submitted a few months ago by Augustus Gadesden to the West India proprietors. It consists of a copper pan in the form of the half of a hollow cylinder, in which are placed a number of metal rods, arranged for facilitating the evaporating surface. Connected with these is a wheel, continually revolving, and exposing to the atmosphere fresh portions of the heated syrup at each revolution. Dr. Evans remarks:

I used a small concentrating vessel of this description in the island of Madeira. The time required for taking off a strike containing fourteen moulds of fifty pounds each was two hours, and two hours and a half. The results were highly satisfactory; the temperature never exceeded 160°. It has also been in operation during two crops in Berbice, where its success appears to have answered every expectation formed of it. Such, however, has not been the case in the trials made of it in Barbadoes, for accounts from that island state that it occasioned a considerable amount of froth, and that the time occupied in taking off a skip was longer than was contemplated.

In Berbice the pan was worked by an intelligent boiler-man sent out from this country for the purpose; in the latter instance its management was intrusted to the sugar boilers of the colony.

The frothing, no doubt, was owing to the incomplete defecation of the cane-juice, and the non-separation of the whole of the albuminous principles; if so, the addition of a drachm or two of washed butter would in all probability have proved a remedy.

When the syrup has arrived at a degree of concentration sufficient for the deposition of three-fifths of the sugar it contains, it presents an appearance which is called "*proof.*" When it has reached this point, the syrup "is clear and transparent, it does not mount or rise in foam or froth, the ebullition is quick and sharp, the bubbles succeeding each other with rapidity, and bursting as they arise. As the inspissation advances, the syrup is seen to run from the edge of the skimmer in a thin, broad sheet, which separates as if it were cut sharply off with a pair of scissors, and never hangs down in long adhesive strings; it communicates to the eye the sensation of being

a sharp, short, crispy fluid, possessing little tenacity or viscidity, and the sound of its ebullition communicates to the ear a similar idea."

A small quantity taken at this time between the fore-finger and thumb, and allowed to cool, shows, on being separated,

"1. That it divides into two small portions or drops, the lower one of which, attached to the thumb, is larger than that adhering to the finger.

"2. That the portions become pretty nearly equal, and their division is effected by a wider separation of the finger and thumb.

"3. On a separation to the extent of half an inch, a slight column of syrup is produced which remains for an instant, and then breaks at its inferior extremity.

"4. A thin thread is produced on a somewhat wider separation, and on breaking the extremity curls up in the form of a hook, and gradually retracts to the portion which remains on the finger.

"5. On a still wider separation the thread on breaking is so thin as to be scarcely perceptible at its lower end, which is drawn upward in the form of a corkscrew."

Concentration at low temperatures may be so conducted as to dissipate all water, and produce perfectly dry sugar. This is said not to be desirable, nine per cent. of water being better to remain, when 100 pounds of the syrup will give 70 of sugar, and 30 pounds of molasses.

In concentration at low temperatures, a simultaneous production of crystals is secured. Hence it is desirable that the pan at first should have but little syrup, say one-third, and that it be added to as evaporation proceeds, and until incipient granulation—which is called "*spark*," from its reflection of light. At this point fresh syrup is added.

There are varieties of syrups besides pure, which are worthy of passing notice.

Acid Syrups are the result of diseased or injured canes; of souring of cane-juice; of deficient use of lime. They are not transparent; become darker on boiling; boiled at low temperature the color is little heightened; the product of molasses is greater, and crystalization more difficult.

Alkaline Syrups, from excess of lime; sugar dark; grain good. Saline and viscid syrups; ebullition difficult, irregular and slow; bubbles do not readily burst; sugars produced, dark, heavy, clammy and deliquescent. These syrups require a low temperature.

Albuminous Syrups, from imperfect defecation; frothy in concentration; but butter or oil being added, the froth disappears without injuring the sugar, if carefully used.

Where syrups refuse to granulate, but appear tenacious and adhesive, they are said to be *smear*.

The real nature of *smear* is not known. It probably depends upon some electro-chemical change excited in the molecules of the sugar during the process of concentration; but which, however, is not permanent, for syrups thus affected will, if left to themselves for some time, gradually become more and more crystaline; or if they be diluted by the addition of a little water, and be again concentrated, granulation will ensue, as if nothing had previously happened. Generally their exposure in a heater for a short time to such a temperature as will preserve their

fluidity, is sufficient to destroy this character, and to restore the crystaline powers of the sugar.

After the concentration of syrup in the *teache* it is passed in the English colonies directly into the *coolers*. The process of passing is called *skipping*, or striking, and is effected either by a ladle or copper skipper, fitted to receive the whole contents of the *teache*. The coolers are shallow wooden troughs, never exceeding one foot or sixteen inches in depth. The saccharine mass remains in the cooler until granulation has commenced, and is then removed to the hogshead. The system pursued of stirring the hot sugar in the coolers is declared by Dr. Evans to be destructive of crystalization, or perfect *curing*. Indeed, the whole process of potting and cooling as now practised, is reprobated as in the highest degree injurious. He argues that it tends to bind up with the sugar all the foreign elements which may be contained in the syrup—no little, even in the most skilful manufacture—and thus results the extraordinary melting away or *drainage*.

The three points to be attained from properly concentrated syrup are, 1, as large an amount of crystalization as possible; 2, as distinct and perfect a crystalization; 3, an easy separation of molasses. To perfect crystalization a perfect freedom of particles to move is necessary. The size and regularity of crystals depend upon the kind of evaporation. A rapid evaporation produces bad crystals.

"If these data be applied to the management of the syrup when skipped, such a plan should be pursued that the syrup may be preserved in a state as free as possible from viscidity or tenacity, so as to admit of the easy approximation of the saccharine particles. For this purpose the contact of cold air, and particularly draughts of wind, should be avoided; and to prevent the too sudden or rapid cooling of the syrup, it should be exposed to a gentle and uniform temperature. That the crystals of the sugar may be perfect in form, distinct, and sufficiently large, the syrup should be placed in such a condition that the process of crystalization shall not be too hurried. It must, however, at the same time be borne in mind that the results of the operation must be regarded in a commercial rather than chemical point of view; consequently, that the time allowed for its performance should be no more than what is absolutely necessary; for in this, as in all other branches of manufacture, time is capital, and can be spared only at a certain sacrifice."

The concentrated syrup should be *skipped* into moulds of the hogshead size, and placed in a curing-house, of uniform temperature, free from currents of air. These moulds are of course fitted for passing off the molasses. The crystals, as they begin to form a crust on the top, should be separated by a wooden knife, and diffused gently through the mass—the operation being repeated once or twice. In twenty-four or thirty-six hours the plugs in the bottom of the moulds are to be removed. The temperature of 90° Fahrenheit is advised for the curing-house.

Another kind of vessel is advised for curing. Water-tight wooden chests, cubes, are to be placed side by side on the joists of the curing-house. The boxes to have false bottoms, two inches above the true, made of metal, minutely perforated, as of fine wire; this to be

covered with coarse sacking. Spread on the sugar an inch thick. Place a wooden cock between the bottoms. Fill the vessel with concentrated syrup, mixing the different skips, and leave in repose till a film of crystals appears—then occasional slight stirrings. Three or four days will be required for cooling where the vessels are large. When solid turn the cock or remove the plug.

Mr. Hague took out a patent for a similar process. A vacuum was formed between the two bottoms, and the air-pump suction introduced. The pressure of the atmosphere drove the molasses. Mr. Cooper improved upon the patent.

Drainage having ceased, art is applied to separate the MOLASSES. The French Beet-sugar makers applied a thick paste of clay to the surface of the sugar. The water of the clay exuding, passes through the sugar, and carries off the molasses. The dry clay is removed and renewed applications of the paste. This, though largely pursued, is deprecated by the chemist. Dr. Evans advises the following improvement:

Liquoring or syruping the sugar has for its object the replacing of the dark-colored molasses by another liquid of greater purity and of lighter color. The liquid to be selected for this purpose must be of a sufficient density to force the molasses before it as speedily as can be done with benefit; it must be incapable of dissolving any portion of the sugar with which it comes in contact; it must be much lighter in color than the molasses, to be displaced; it must be innocuous to health, and of such a nature as not to diminish the degree of sweetness of the entire mass.

The only liquid with which we are acquainted that possesses all these qualifications, is a light-colored syrup, of such a density as to indicate its saturation at the temperature of the atmosphere.

The use of the syrup should be thus: remove the crust on the upper surface of the sugar, crushing it, and mixing with cold water to a paste; replace it upon the sugar. The syrup, however prepared, must be of the color of the sugar desired. It must be poured cold to the depth of two inches over the sugar prepared as above.

In the colonies, says Dr. Evans, it will seldom be necessary to "syrup" more than once; but if a still better color be required, the operation may be repeated. We may, if we choose, as I have already stated, by the use of very colorless syrup, produce a sugar equal to the best crushed lumps of the European refiner. It may, however, be doubted whether carrying the process of syruping to the extent practised in Europe will be, on the whole, profitable.

Sugars which have undergone this process, even to a limited extent, are not improved in color only, but they are also much drier, less adhesive, their grain is more distinct, and they suffer no loss of weight from leakage during the voyage home.

Cane of the density 1073, or 10° Beaumé, at 60° temperature is estimated to contain about 18 per cent. pure sugar, reaching in some instances as high as 22 per cent. In some of the most successful of the Barbadoes estates, three hogsheads of sugar, of the average of 15 cwt., with a proportionate quantity of molasses, are produced from a single acre of cane.

The last consideration connected with the manufacture of sugar, is the disposition of its drainage or molasses. In Jamaica nearly the whole of this is converted into rum; and in other of the West Indies the same process is followed. At the present time we believe that the distillation of spirits is almost entirely neglected in Louisiana,

though we recollect being informed by a very intelligent planter of that State, that some years ago, when molasses was at a very low price, he converted the whole of his crop into rum, equal in quality to the West India, which sold in the New Orleans market for one dollar per gallon.

West India molasses, from the little attention paid to it, is of very indifferent quality; but on being carried to England it is converted into sugar of excellent quality.

The planters of Mauritius reboil, two or three times, their syrups with the same machinery used in other places. The boiling of molasses, it is said, is attended with small comparative expense. Where no change is contemplated in it, the planters, in the hope of increasing their sugar product, carry the point of concentration too far, to the disadvantage of that product.

The following summary, embracing nine leading principles in the cultivation and manufacture of sugar, is deduced from the reasonings of Dr. Evans, in his elaborate work. They should properly be committed to memory.

"1. The canes should be cultivated with a view not merely to their size and abundance, but we should, at the same time, by every means in our power, cause them to yield a juice as rich in saccharine matter and as free from all impurities as possible; and to prevent the evil which would result from decomposition of the juice, when cut, the canes should be conveyed to the mill without loss of time.

"2. We should attempt to get from the canes the largest quantity of juice, either by improved mills, or by close attention to the fitting, bracing, feeding, &c., of those now in use; by sprinkling the megass with water, or by exposing it to steam, and by repassing it between the rollers.

"3. We must employ the best means in our power to defecate the cane juice, that is, to make this liquid approximate as near as we can to a solution of sugar and water only. Its speedy exposure to the action of a high temperature must be effected, and the greatest caution must be practised in the administration of the '*temper-lime.*'

"4. The defecated liquor should be evaporated to the density of 32° Beaumé, or to any other suitable degree, with the greatest expedition; care being taken at the same time that the carbonization of even the smallest particle of the sugar be prevented, by constantly preserving in the pan a depth of liquor sufficient to cover that part of it which is exposed to the fire.

"5. The object of filtering the liquor through animal charcoal is the more perfect removal from it of the albuminous principles, excess of lime, coloring matter, acidity, &c.

"6. That the concentration of the syrup to sugar proof should be effected with rapidity, and at the lowest temperature possible.

"7. That to promote an abundant and perfect crystalization, repose, moderate warmth, and an equable temperature are necessary; and to effect the better curing of the sugar, these two operations should be performed in the same vessel.

"8. That to induce the complete separation of the molasses, the sugar, when sufficiently cured, should be submitted to the process of liquoring.

"9. The molasses must be concentrated before any fermentative change shall have commenced."

It is to be observed that the facts and principles of this and our preceding paper, are obtained from one conversant practically only with the system of sugar manufactory in the English colonies. Most of them may be said, however, to be of universal application. How far they may, or may not, correspond with results, etc., in Louisiana, remains to be inquired in other numbers of our series. It is for the interest of sugar planters that they be conversant with everything going on in their art in any quarter of the world, and we desire to give this information. In farther aid of our labors, we are in expectation of a work from England, not yet published, and information which has been solicited from the East Indies.

Nor can we dismiss the subject without adverting to the condition of the English West India Sugar Colonies of the present day. On every hand the loudest, deepest, and most bitter complaints are sent up to the crown. It is impossible for these planters not to feel that they have been sacrificed to the blind and misguided efforts of religious enthusiasts and pseudo-philanthropists in England, subserving the purposes of interested politicians.* One of the most significant movements of the times, in this respect, must be considered the late one in Parliament, calling for a Committee of Investigation into the state of the sugar colonies, and the grievous complaints of planters.† The mover of this resolution in his remarks took it for granted, that under the present system of labor adopted in these islands, and in the relationship subsisting between the whites and blacks, their ruin was inevitable, if not already achieved. What results may grow out of this commission of examination, the facts and statistics collected by them, and the testimony elicited, it is not hard to determine. Sure are we, that in the overwhelming evidence, fanaticism and folly will be unmasked and stand rebuked before the world! May we not hope, too, that the influences will be benignantly felt in our own country in crushing those nefarious combinations, whose ends, whether perceived or not, are the same embarrassment and ruin! The condition, prospects and happiness, yea, even the lives of five millions of our population, white and black, are to be jeoparded in experiments, which philosophy, history, and all example denounce and deprecate. Phæton in the car of the Sun is an admirable allegory of licentious abolitionism!

Dr. Evans complains of the loose manner in which the statistics of

* We think that Gov. Hammond, in his letters on slavery, unanswerably shows that the politicians of England, to build up her East India possessions, and break down the United States, lent a willing ear to the sincere but deluded zealots of emancipation. We shall take occasion at an early day to present an article showing, upon every point, from the most reliable data, the actual condition of the British West Indies at this time, contrasted with former prosperity.

† "Nothing, the West Indian contends, has happened that might not have been confidently expected. During the period of slavery the want of labor was unknown, for the great majority of the population was compelled by law to work upon the plantations from day to day. But when that great social change, effected by 'The Emancipation Act,' took place, vast numbers of the freed people betook themselves to other occupations natural to a free community; many to desultory pursuits, squatting, and vagrancy; while those who continued to work, were, from the fewness of their number, and the urgent necessity for their services, enabled to dictate their own terms to their employers."—EVANS.

the West Indies are presented. Could a complete register be preserved of each of the islands, and in fact, of the operations of the chief plantations, etc., much would result to the general benefit. Dissemination of knowledge of this kind would be of much advantage to Louisiana, and we have at all times endeavored to obtain it. A book is recommended, on each estate, to record the chemical character of the soil, mode of cultivation pursued, nature and quantity of manure, weight of canes per acre—their description, whether plants, ratoons, age, etc., quantity of juice expressed by mill, density of that fluid, and other peculiarities, amount of sugar and molasses obtained, etc. To this may be added, kind of force employed, kind and consumption of fuel, expense of machinery and improvements, results in drainage, condition of slaves—ages, sex, health, longevity, diseases, fertility, expense of maintenance—kind and quantity of food, of clothing, value of other products, value of slaves, etc., etc. The preservation of these statistics on all the sugar estates of Louisiana, we commend, in the assurance that it will be attended with the best results. To which farther add, system of management of slaves—observations on weather, temperature, atmosphere, etc., etc. Nothing would please us more than to obtain such a paper, rigidly *kept for one or more years from one of the largest estates in Louisiana*—and we will endeavor to obtain something of the same kind from the West Indies, by way of contrast. Bearing upon these points are the following remarks of Dr. Evans:

"The sugar-cane has never been produced from seed in the West Indies, it is propagated by cuttings or germs: plants so raised, as is well known, become in time liable to deterioration and disease, and often entirely disappear.

"There is, indeed, much reason for believing that this change has already commenced in the Bourbon and Otaheite cane. Ought we not to inquire, whether this disposition might not be checked, or whether a great improvement in the vigor of these plants might not be effected, by a change of cuttings between colony and colony, or even between plantations in the same colony?

"Or would it not be useful to obtain occasionally a new stock from the countries which originally produced them?

"These, and other questions of equal importance, cannot be answered, for as yet they have attracted no attention."

Among the many schemes lately advanced for the relief of the British sugar planters in their deplorable condition, one or two may be noted. But none of them, in our opinion, go to the bottom of the difficulty.

In consequence of the deficiency of force on the plantations, and difficulties of labor, it is proposed to establish CENTRAL FACTORIES, like toll mills, in the heart of different sugar regions for the manufacture of the canes for the contiguous estates for miles around—these factories to be supported by British capital, and furnished with English laborers. Dr. Evans argues strongly against their practicability—from the nature of the country to be traversed in carrying the canes to mill—from the bulky nature of the canes—from the important consideration that all the canes from the estates arrive contemporaneously at maturity—and their speedy grinding, so necessary,

could not be secured, etc. He finally shows that, all things together, the expense to the planter would very likely be greater than at present.

Another measure proposed has been to export to England the concreted cane-juice, to undergo manufacture there. It is thought, that, with due modification, etc., of the British Tariff, this plan would be greatly successful.

The following *restrictions* are chiefly complained of by the British sugar estates in their present embarrassment, and with them we close for the present:

1. Upon the importation of labor by "passenger acts," etc.
2. Upon improvement in the quality of product—nothing being allowed, until lately, to be exported superior to Muscovado.
3. Upon the exportation of the raw material, juice, etc., by the nature of the duties levied and want of discrimination.
4. Upon the use of saccharine matters in England for various manufacturing purposes.
5. Restriction by navigation laws in favor of British ships.
6. Upon the importation into the colonies of the produce of foreign countries.
7. Upon the importation of colonial spirits into England.

Art. IV.—AMERICAN NATIVE WINES.*

SUCCESSFUL VINEYARDS IN THE SOUTHERN STATES.

To J. D. B. De Bow, Esq.

Sir—In compliance with your complimentary request, to send you from my pen an "article on the Vine," I put together a few thoughts illustrative of the above heading.

As you state in your letter to me, the subject of vine culture is becoming important in our Southern country; and, of course, the light of experience thrown upon it by a Southern periodical may be useful.

From the experience, observation, and reading of near twenty years, I have much to say, which, of course, must be condensed into leading heads only in the limited compass of a single essay for a periodical; and as experiment is the great test of utility in all arts, and especially in that appertaining to agriculture, I will confine myself chiefly to its results. In regard to my simple but successful mode of wine-making, and matters connected therewith, I would refer you beyond this paper, to those re-published by Mr. Burke in the Patent Office Report, of 1845, taken from different agricultural periodicals contributed to by me.

* We published in our June No. a paper from Mr. Poinsett upon the cultivation of the vine in Southern States. The present contribution, from its practical character, must have great value. We shall be obliged to Mr. Weller from time to time for other results, as his *vines* and *wines* are now gaining much celebrity; and we hope to see them in Louisiana before very long, where we shall take great pleasure in calling attention to their merits. We should also be obliged to Mr. Adlum of Georgetown, D. C., Mr. Cox of Georgia, and Mr. Herbemont of Columbia, S. C., for additional particulars.—Ed.

North Carolina is ahead of all her sister States, in the wine product, by some thousands of gallons, according to the agricultural census of 1840; and, as far as I know, my vineyard is the largest in this State, and I suppose in the South, and perhaps the most productive; since, besides entertaining hundreds of visiters, and disposing of quantities of grapes carried away, I made, last vintage, forty barrels of wine. My increase of product has been annually, for a few years past, about ten barrels. I sell readily my wines at a good price, and, of late years, have lost none by spoiling.

Of our native Scuppernong, the great grape for the South, I make wines that readily bring me, in different markets, from $1 to $4 per gallon, according to quality. I say quality, for by a peculiar process of manufacturing, my wines are good and fit for market in a few months only after making. My lowest quality of wines are made by adding, as the preserving ingredient, one-fourth part of the best spirits. My best wines receive three pounds of the best, double-refined sugar per gallon. Spirits add their own bulk to the volume of the liquor; sugar adds very little to the volume; hence, mainly, the difference in price.

Another evidence of my success in the vineyard, is the increasing demand for my SELECT AMERICAN WINES. Encouraged by patronage, I have for years past cultivated the choicest varieties, selected from every part of our country, in the nursery to be well-rooted and ready for market; and more of the Scuppernong than any other variety, not only as the best Southern grape, all things considered, but that it cannot be propagated successfully by cuttings, but by layers or grafting.

At the medium price of twenty-five cents for a well-rooted vine, I have sent boxes, inclosing with the vines specimens of wine (as presents), to most distant parts of our country, as to Natchez, Miss., and St. Louis, Mo.; and from reports of success, and farther demands (I have now several letters or orders on hand from distant places), I infer that the vineyard cause is indeed advancing in the South. And why should it not advance? There is nothing to prevent, I opine, but blind, servile adherence to foreign plans and treatises on vineyards This adherence formerly prevented the success of the vineyard cause in our country, and would ever have prevented, had not American genius, that struck out new plans of traveling and conveying intelligence, by steam and telegraph, also struck out native modes of vineyard and wine-making, to emancipate us from European dependence. If we can safely judge blessings from the light of experience and Revelation, grapes and wines rank by the side of bread itself. The terribly destructive vice of intemperate drinking is scarcely known in vine countries, nor will it be in ours, I trust, after the general spread of vineyards. To Mr. Adlum, of Georgetown, D.C., Mr. Cox, of Georgia, and Mr. Herbemont, of Columbia, S.C., and some others, as pioneers, we are indebted for the practical demonstration that America might wholly depend upon her own resources for grapes and wines, and throw off European shackles in these as well as other respects.*

But more directly to my own experience in vine culture. Induced

* We may also add the Hon. Joel R. Poinsett of South Carolina.—ED.

to the undertaking by the hope of being able to strengthen the influence of the temperance cause, I started with a pretty large number of Scuppernong and other native cuttings—of the Scuppernong, mostly, as I had often read and heard the high praises of this famous native of our old North State. The Scuppernong cuttings all put out in the spring, but, as usual for them, they all died in the summer. After this dear-bought experience, I learned that this kind would not grow generally from cuttings, and to attempt to use them is a fruitful source of discouragement and loss in the business. They answer in Europe, where not only mildness of climate favors the plan, but also cheapness of labor. It is decidedly best for the American vintner to start his vineyard with well-rooted vines, reared in the nursery from cuttings or from layers. Even in grafting, it is better to begin in the nursery and transfer into the vineyard after a year's growth; this is a common method with me; though I have a very pretty portion of vineyard acquired by searching the woods late in the spring, when vines are in leaf, and getting stocks of the Fox and other common kinds, an inch or upward in diameter, grafting them wedge fashion, and then transplanting ten feet each way. The scions (having been kept, back in a cool place, from sprouting) were Weller's Halifax and Norton's Virginia Seedling. They are kinds I esteem next to the Scuppernong, as free from propensity to rot, and in every other respect good.

As to grafting, there is a very important distinction for those desirous to adopt. It is the uniform result of long experience, that if grafting is effected on stocks procured or dug up from the woods, success, with due pains taken, will surely follow, if done at any time from the complete fall of leaves in autumn until late in spring, or even summer, when the scion can be kept back from sprouting. But if the graft be on stocks not dug up, or stands where it is to remain, it must be done in the fall, or early part of winter, to insure success. This last fact is important to those desirous of changing the kinds of grapes in their vineyards, or vines standing on their premises, to eligible situations. In this way I speedily changed my foreign and other rotting kinds into unexceptionable native varieties. No clay or any other covering of the grafted part is necessary in grafting grape vines even with the ground. All that is to be done is to saw off your stock, and put in your scion (with two or three buds thereon), wedge-fashion, as in cleft-grafting fruit trees, and then draw earth around a few inches high, leaving one or two buds above ground. Or, where the stock is very large and inconvenient to split, I have made a gimlet-hole and inserted the scion spoil-fashion, and then drawn the earth around. The vine is porous, and sap does not pass between the wood and bark, and therefore the success in the last-named mode of grafting. But to avoid disappointment, the vintner should be aware that more trouble and attention is required in the grafting process, to pull off sprouts from the old stock, as they spring forth to rob the graft, than in the process itself; and this is far more the case in grafting to stocks standing in their original place than in those procured from the woods. To compensate for this, however, the growth from the former is much greater than from the latter, viz., eight or ten feet a season in the one case, but thirty feet not uncom-

monly in the other. Grafts often bear some fine clusters the first season of growth, and pretty considerably the second. A few years past I had the curiosity to measure the second season's product of a Halifax vine which I had grafted to a tolerably large stock. It was half a bushel of fine grapes—equivalent to a gallon and a half of wine, if made with sugar, and two gallons, if made with spirits as the keeping ingredient.

In reference to this keeping ingredient, I am reminded of one of the grand errors impeding the advancement of the vineyard cause in our country. The error in practice is predicated on the false idea that the juice of American grapes is as strong as in foreign countries, and, therefore, needs as little help to safely keep the wine as that across the waters. All good authorities on the subject, as Mr. Herbemont, &c., concur in the idea, that while American vineyards far exceed European in yield, yet they fall far short in the strength of the juice yielded; and, therefore, corresponding keeping ingredients must be used, or no adequate success can be expected. True, I, as others, have made wine without such ingredients when the grapes were not only ripe but shriveled; but this will not do so as a business, since, though the grapes may not fall or spoil, by being left too long on the vine, yet the quantity is small and the vine will be injured for farther bearing; besides, many other reasons might be adduced, all of which show the plan to be impracticable, of making wine as a business in our country without a sufficiency of some keeping ingredient, as sugar or spirits, or both; the universal experience from all reliable sources of information, as I can learn, is, that bad success has ever attended the trial. I experimented in that way to the loss of half my wine years since. But with a steady eye to the physical fact of the comparative weakness of American grape-juice, and adding a plenty of sugar or brandy, or both, I have lost no wine for several years; and, from most reliable sources, I learn that most European wines for safe-keeping have spirits added to them more or less--as the port wine, ere it crosses the ocean, one-third; and I venture the suggestion that if more of the spirits made in this country was added to the grape-juice, or used as in wine-making in foreign countries, instead of being drunk in its crude state, it would be much better for the temperance cause.

Another advantage of a free use of keeping ingredients is that good wine can be made of green grapes, all or in part. By a sufficiency of sugar or brandy, or both combined, I have succeeded beyond my expectation with the green fruit of the vine. I had the hint to try it from that American pioneer in wine-making, Mr. Adlum, whose "rules" are contained in the "American Farmer," to make wine from green, and, indeed, half-grown grapes. I will here give a brief account of a barrel of wine which I made last vintage with partly green grapes, gathered green because at a distance from my house, and in danger of being depredated upon.

A few months since a young man, who manages mostly my vineyard concerns, brought me a specimen of a very fine-tasted wine. I ordered him to bring me the label attached to the barrel containing it. Seeing it was No. 25, I turned to the corresponding number in

a book of record of wine-making, and the following is the substance thereof for said barrel:

Made, September 17th, 33 gallons, composed of the following: viz. 5 bushels of white Scuppernong grapes, *half green ones*, 2 bushels of purple Scuppernong or muscadine, 2½ bushels of common or bunch grapes of the woods; fermented, after mashing (with a machine of two wooden rollers) two hours; juice strained through folds of a woolen blanket, as it run from the press; 20 lbs. of common brown sugar then added, and 8 gallons of good apple-brandy—and turned into a new cask, fumigated with a sulphur match.

And I add, the cask stood in one of my wine-cellars undisturbed till the time the said specimen was brought me, and, that afterward being racked off, it sold readily for two dollars a gallon under the name of *Weller's Scuppernong Champaign.*

While my book is open, I will give the result of another *batch* of grapes made with nothing but sugar as the keeping ingredient, viz.:

Seven and a half bushels of white Scuppernong and three and a half colored Scuppernong, or muscadine, or bullus grapes, mashed at night, and pressed off next morning; juice, after straining and mixing, divided into two casks—viz.: into one put 20 gallons of juice, mixed with 50 lbs. of common brown sugar, swelling the volume of the liquor half its own bulk, or 3 gallons—making 23 gallons in cask No. 38 (made October 1st); cask No. 39 contained 13 gallons of wine, viz. 11½ gallons of juice and 34½ lbs. of double-refined crushed sugar.

The last 13 I sold at Raleigh to members of the Legislature, and other good judges of wines (pronouncing it superior to any foreign), at $4 per gallon, under the name of the *Red Scuppernong Hock;* and the other kind called the *White Scuppernong Hock*, sold at $2 a gallon—a remarkable difference, arising from the quality of the sugar. Some may be disposed, I here remark, to pronounce the wine *adulterated*, when spirits are added. But why? Wine consists of certain products of nature *chemically combined.* But if some of these products are deficient in any juice, why is it not allowable to supply the deficiency by some product at hand to answer the end of a delicious, and healthful, and safe-keeping wine? Alcohol is one of the purest products of nature; pervading more or less the vegetable world, as a sort of *preservative power* therein. And if not a sufficiency of this power why not *increase* it artificially for wines in the form of pure spirits? I say *pure spirits;* for if any spirits are well *rectified*, as are what I use, and thus divested of any *peculiarity* of taste, the wine made with them retains the peculiar zest of whatever grape is used—thus not only a pure or unadulterated liquor (if purity consists in freedom from any deleterious or poisonous ingredient, or what is common in many foreign wines, so called, at least), but as a Frenchman would say, *unique*, or one in taste and properties; or equivalent to the foreign wines made with spirits distilled from the kind of juice from which their wines are mostly composed. When American juice becomes sufficiently plentiful by the increase of vineyards, it may be distilled, and its alcohol used, as in Europe, instead of pure spirits. But from my acquaintance with chemistry, and experiments partially made, I predict no essential difference as in the properties of the wine, whether made with pure spirits or with spirits distilled from the grape juice. But according to the suggestion of a friend, I will more fully experiment with the latter; or distil Scuppernong juice and add its brandy to make Scuppernong wine; and

intend reporting the result in due time. But in view of what may be called pure ingredients, whether sugar or spirits, I venture to assert that wines made with either may be called *pure* wine; especially if compared with *foreign* wines, or those so denominated, often adulterated with poisonous ingredients. And I know this, that my wines, with no other ingredient than sugar, or pure spirits, ever added, circulated in this region and other parts of our country, are pronounced by the best judges to be more unequivocally pleasant, healthful, and medicinal, than any foreign. Many ladies in delicate health have found essential benefit from their use. And I add that the wines made with pure spirits, as a medicated medicine, and in some other respects, is more generally approved than that made with sugar. One thing is certain, that all wine properly so called, has alcoholic power therein, generated by fermentation, if not otherwise acquired. Scripture wine is clearly alcoholic, from the fact of its excess producing intoxication, and the Bible warns against drunkenness by its intemperate use.

Another reason why it is preferable that an American vineyard should be started at once, with well-rooted vines, rather than with cuttings or grafting, is the greater distance vines should stand apart in American vineyards. Cuttings 10, 20, 30, or 40 feet apart, instead of 3, 5, or 6, as in European vineyards, have a discouraging appearance. But not so vines 5, or 10 feet high, fastened at first to stakes, running unchecked in length, and trimmed only in summer or fall to prevent them from becoming bushy. Until 6 or 8 feet high they should run on trellises, or ramify over scaffolding. This is the true American successful mode of vine culture and productiveness.

The European plan (as laid down in most treatises on vine culture), of near planting, humble height, and close trimming, is as pernicious an error as that of cultivating foreign wines instead of choice natives. This plan has been tried without success over and over again in different parts of our country, as any one may learn by taking due pains to inform himself. It is remarkably significant that no foreigner has ever succeeded in our country at grape culture. An exception, perhaps, in the case of the colony of Swiss, at Vevay, Indiana. But their vineyard is a final failure, as any may learn by reading Burke's Patent Office Report, of 1845, at page 953. Foreigners too, are much wedded to a system, doing well abroad but not here. An intelligent Frenchman visited me a few years since in the grape season. While *meagre* in praise of other grapes, he highly extolled the Scuppernong, saying it was every way equal or superior to the best French grapes; but alleged that better success would attend my vineyards if I would trim more and resort to posts and trellises instead of scaffolding. I answered him that the management he disapproved was the grand secret of my success; and that following his suggestion would soon render my vineyards profitless, and eventually ruin them. The very luxuriant, far-extended growth of grape vines in our forests and hedgerows is the true *model of nature* ("NATURE a name for an effect and God the cause," cause and effect both *unerring*), pointing out the *unerring* plan for an *American vintner* to pursue. As long as I disregarded that model I found the vineyard an *uphill* business. But the wished for success followed, after giving ample room on every

side for vines to expand themselves; first unchecked in length upward and then sideways on trellises and scaffolding, so that, at length, underneath the canopies nothing is to be seen for 6 or 8 feet from the ground but main vine stems and supporting posts.

Another of nature's models gave me a hint to let my vines have the same advantages as to roots as the trees in the woods, or old piny fields, viz.: that the falling leaves be secured from blowing away by scarifying the ground ere they fall, and afterward, in order to increase annually the fertility of the soil, instead of by direct manuring.

The common distance apart I have planted Scuppernong vines is 20 feet, and other kinds 10; but I now consider 20 too near for the Scuppernong; 30 or 40 being better, unless it is calculated to remove every other one before they become too large. A Scuppernong 14 years old from the planting, I measured to-day, and it covers an area whose diameter is 50 feet. Another now in view from my office runs 30 feet on scaffolding, and then ascends an aspen tree, spreading over its branches to the height of about 40 feet; the aspen tree full of grapes, so to speak. About ten years since I planted two vines of this kind in the garden of a neighbor; trained from the garden on some oak trees in a grove, a barrel of wine was made from this last vintage, besides abundance of the fruit for family use; and I was assured that if all the grapes had been saved, another barrel had been the result. A vine in the lower part of this State, near the Scuppernong Island in the Roanoke, whence this grape and its name originated, produces its annual yield of five barrels of wine, I am most credibly informed. With myself and others in this region of country, Scuppernong vines have produced at rates of 2,000 gallons per acre.

The berries of this grape are very large. I have frequently measured select ones and found them to be three and a half inches in circumference; two I have found 4 inches round. They are more easily gathered than other kinds. A large sheet with poles fastened to two sides is held under the canopy, and a third person shakes the canopy above with a forked pole, and all the ripe grapes fall into the sheet and the green ones remain. In making wine with the green ones they have to be picked off by hand like other kinds. They are ripening here about two months; and that period ensures *successive gatherings;* and the *most delicious* of grape fruit. The Scuppernong is peculiarly a Southern grape; and for the South it is doubtless the best grape in the world, considered in all respects.

From the best sources of information, I learn the Scuppernong does well everywhere south of latitude about 37°, when properly managed and the management is very simple, though very necessary to success. It is to trim enough in the first stages of its growth to prevent its becoming bushy, and afterward (say 50 years, or no telling how long a vine will flourish) to keep by scaffolding the canopies clear underneath of all straggling or hanging-down branches, six or eight feet high. This being not done, the vines will surely fail to bear well, and to have the fruit in perfection.

My "Halifax" I estimate next to the Scuppernong grape. It runs or spreads to a great extent. From my study I see the top of an apple tree covered with fine large cluster grapes from it. And by

measurement with a ten foot pole, I find the tree forty feet distant from where the main stem of the vine stands to the ground, and the tree is twenty feet high. I was told by good authority last winter at Raleigh, that this grape, carried to France, was considered there to rank among the first class wine grapes. The berry is as large as a common bullet, and clusters of uncommon size. One peculiarity of it is, that it changes its color to a bright purple long before it ripens, and is a good table grape. But the Norton Virginia Seedling, next in excellence, is a good eating grape, or for wine, as soon as it changes to a dark purple.

Of one hundred and fifty varieties of grapes, I have not more than about twenty I consider good and unexceptionable in all respects for *American* culture. My foreign grapes, after trial, I cut down as worthless; and of some even noted natives I cut down all but a few also, and grafted unexceptionable kinds upon their stocks. Of the Catawba, Isabella, Herbemont's Madeira, or Warren and Longworth's Ohio, or Segar box, and others, I retained a few as specimens of their fruit, when any happened not to rot, which is about one season in three with me; though I see, from the "Patent Office Report," that the Isabella and Catawba are not so prone to rot in the State of Ohio, and that more northerly they are still less prone. These kinds rot here every year, more or less; but about every third season none escape this calamity worth regarding. The rot is a grand difficulty as to Southern vineyards, especially—owing, I suppose, to the heat of the climate; and the vines prone to it are worse in this respect by age. This season has been uncommonly fatal to the kinds in question. Till a few days past, we have had two weeks continued rains. Even some grapes in the woods rotted.

But to close this essay, now longer than intended, I will briefly report those varieties in my vineyards rotting and not rotting. The Isabella, Catawba, Herbemont's Madeira, Longworth's Ohio, Elsingburg, Vevay (of the Swiss), Norton's large purple, and a number of other kinds, pretty much all rotted; some others, about half. The Vine Arbor, Somerville, my Halifax Seedling (from the seed of the Halifax, a most excellent grape), Brinkleyville, and a few others, some few rotted on part of the vines. The rot, I observe here, is as tantalizing a calamity to the vintner as the yellows to the silk grower. I relinquished the silk business as hopeless of profit in the South (where there are great and sudden vicissitudes of weather), because on the very eve of spinning cocoons, when expectation was on tiptoe, often the worms took the disease called the yellows, and nothing could arrest the destruction of an expected crop of silk. So of grapes prone to rot, on the very eve of maturing they often perish. The best preventive remedy I have found is, to keep plowing the lands with furrows turned toward the foot-stems of the vines in cleaning the ground. This at length leaves the ground much lower midway between the vine rows, and prevents too much occasional moisture near the main vine roots. The hollows thus made answer also for inclined plane ditches, where the vineyard is on shelving ground. But the best preventive is to select kinds not prone to rot. And such with me are: the Scuppernong, Weller's Halifax, Norton's Virginia Seedling, Lenoir, North Carolina, Hunterville, Franklin and

some other varieties, good in every respect, and none of which rotted this season; heretofore, few or none of the Vine Arbor, Weller's Halifax Seedling, Somerville, and some others.

I am, dear sir, with respect, yours,

SIDNEY WELLER.

Brinkleyville, Halifax Co., N. C.

NOTE BY EDITOR.—At a late meeting of the "Cincinnati Horticultural Society," a committee having been entrusted with the subject of Wines, reported, after a variety of trials and experiments, as follows:

"The result of the examination is a conviction that our soil and climate are well adapted to the production of a very fine, delicious wine, and the Catawba is the species which yields the finest quality. The pure juice of the grape, the committee add, when judiciously managed, will furnish the finest quality of wine, without any addition or admixture whatever (thus raising an issue with Dr. Weller), that no saccharine mixture is necessary to give it sufficient body to keep for any length of time in this climate. In confirmation of this opinion, we would state, that two of our German friends, who were present, informed us that they had taken, on different occasions, specimens of the wine of this country to Germany, and submitted them to the judgment of various connoisseurs, by whom they were highly approved, the principal or only objection being that they were too strong to compare with the fine kinds of the lightest German wines. A taste for the wine of this region appears to be well established, since all that can be produced finds a ready market at good prices; and the committee are of opinion that the period is not far distant when the wines of the Ohio will enjoy a celebrity equal to those of the Rhine.

Art. V.—RESOURCES AND PROGRESS OF TEXAS.

HISTORY OF TEXAS—CLIMATE, SOIL, PRODUCTIONS, POPULATION, HEALTH—CULTIVATION OF SUGAR, COTTON, RICE, TOBACCO, ETC.—VALUE AND QUALITY OF LANDS—WEALTH, ETC., OF BRAZORIA COUNTY.

We are indeed delighted with this paper. It is the first successful attempt to procure minute and reliable information upon this interesting region, though we have been trying a long time. Will not our friend continue these papers, as we assure him that they will be read with avidity in every quarter of our Union? Being *on the spot*, he can collect everything. The importance of this will be understood on referring to the circular issued the other day by Mr. Burke, of the Patent Office, to the people of Texas. We would like to hear also from the interior and northern regions of Texas.—EDITOR.

PREVIOUS to the annexation of Texas, the little republic, from its geographical position and other causes, was the theatre of intrigue and foreign negotiation, and played no unimportant part in the history of the times. By its admission into the family of States, it has been shorn of its political importance, but has acquired an increased interest as to its productive resources. The security afforded to person and property by the act of annexation, has given a value to all the elements of prosperity within the new State, and the time is not distant when Texas will contribute her full share to the collective wealth of the Union. The mixed character of her population, uniting Yankee skill and enterprise with German industry and perseverance, is a guaranty to the rapid and complete development of

the resources of the State. It is not my purpose, and far beyond my ability, to allude even to the variety and extent of those resources. A glance at the map showing the limits of Texas, spreading along the sea-coast, and running back into the mountains, embracing almost every variety of climate and production, mineral and vegetable, with broad rivers for the transportation of all that her fertile valleys may yield, must satisfy any one that, with proper direction to her industry, she is destined to a high place among the agricultural States. The soil is of unsurpassed fertility, and so varied in its properties as to be adapted to the growth of any article suited to the climate. A chemical analysis of the soils common in this portion of the State has been published by William P. Hart, M.D., in the June and July numbers of the "Commercial Review." The result of that analysis, though incomplete, places the soils of Texas in favorable contrast with the best in the United States. The three varieties therein analyzed, and known here as the *peach*, the *cane* and the *elm* soils, named from their characteristic and prevailing growth, exhibit different, yet equally valuable compounds. Experience has partially tested their comparative merits; the most successful results in the manufacture of sugar hitherto, have been obtained from the peach land, the cane soil has yielded the heaviest product in corn, and grown the largest sugar-cane, while the elm, if thoroughly drained and put in a high state of cultivation, is considered the best for cotton. But the relative value and production of these soils is still a matter of dispute among our planters, and so much depends upon the previous preparation of the land, the number of years it has been cultivated, its drainage and deep plowing, that the preference of one over another, and their adaptation to the production of corn, sugar-cane or cotton, can only be arrived at by a full and accurate analysis showing the peculiar properties of each.

Of late years chemistry has become the handmaid of agriculture. It cheapens labor and increases production. In the over-populated countries of Europe it has, by a judicious application of means to the end, contributed to the support of millions—its light follows the furrow of the plowman. In France, particularly, the discoveries in chemistry have been happily applied to the increase of agricultural products. The example should not be lost to us; and if the gentleman who has begun an examination of the Texas soils should farther prosecute his inquiries, show our planters what are the constituent principles in the cotton-plant, the sugar-cane, and in Indian corn, as also the relative properties of our soils, and which is best adapted to the growth of either of the above staples, he will render a lasting and not unforgotten service to the State.*

In all parts of Texas the disproportion of prairie to the timbered land is an objection very generally urged, and will be a source, eventually, of much inconvenience to the sugar planter. But this evil may be guarded against by a timely resort to ditching, or the use of the Cherokee rose as a hedge. These expedients, apart from the ulti-

* If the planters would assist us we would have all these soils and staples rigidly analyzed and examined. The expense, however, would be too great for us now. Any planter disposed to co-operate in this matter, might easily raise the necessary funds by a contribution among his neighbors and friends, which would be a trifle to them.—Ed.

mate saving of labor, will enable the planter to apply the timber now required for fencing to the making of staves or for building purposes. Economy at the start will do much toward obviating the scarcity of timber.

In Western Texas, and in the interior above the flat country on the seaboard, the prairies are almost exclusively planted, being more easily brought into cultivation, and producing as well as the woodlands. In this region, and near the seaboard generally, the experiments that have been made in prairie culture have not been successful. The property of the soil is impaired by the heavy rains which in winter and early in the spring not unfrequently cover the surface for days and weeks; and as yet no thorough experiment has been made in draining. I am inclined to the opinion, however, that much of the prairie lands near the coast, if well drained and broken up with a subsoil plow, would equal in production the best lands in the State—at least for sugar. Hitherto but little attention has been paid to the proper preparation of our soils. The wretched custom, so prevalent at the South, of seeking to make the most out of land in the shortest time, without a thought to its improvement or durability, has been carried out here to its fullest extent. But since our admission into the Union a better practice is prevailing, and our improvements in agriculture keep pace with our brightening prospects. All new inventions, and the implements of labor of the most approved model, are sought after, and with the facilities afforded through a weekly communication with New Orleans, Texas, in the making of sugar, as in other experiments of agriculture successfully tried, will avail herself of the example of Louisiana and her sister States.

With the lights of such experience brought to bear upon a soil and in a climate eminently adapted to the production of the great Southern staples, the agricultural advancement of Texas must be rapid and remunerative. But let me not be understood as encouraging a rash and thoughtless immigration. There are many inconveniences attending a settlement here. The population is scattered, the water unwholsome, rendering cisterns essential on every well-conducted farm; the roads are bad, in winter time making a land-carriage for produce for three or four miles a matter of more delay and difficulty than a distance of twenty miles on a good road. The mosquetoes, too, besides a host of annoying insects, in number and size, would not suffer by comparison with their kindred found in the everglades of Florida.

But perhaps these are minor ills contrasted, among others, with the profitless and disheartening labor expended upon the worn out lands in many of the old States; and we should bear in mind, that, as every period and station in life has its trials and difficulties, so every clime and country has its advantages and disadvantages. The tillage of the earth is the most ancient, as the most honorable occupation of man; but, at the same time, to be made profitable, it is the most laborious. The varying seasons must be met by a change in the mode of cultivation, and the most systematic and industrious cannot count each year upon a certain and full return for their labor. This is the experience of all countries, and particularly so of this part of Texas. It is liable to extremes of drought or rain; the for-

mer occurring mostly in the spring and summer months, lasting ten and sixteen weeks, and followed by floods of rain for a corresponding period. Should the rainy season set in during the months of June, July or August, the caterpillar is sure to appear, and if later, the difficulty of gathering a cotton crop in a wet fall is known to all who have had any experience in the raising of that article. This uncertainty in production has induced many, or nearly all who can afford the expense, to enter upon, or look ultimately, to the growing of sugar-cane. I do not mean to say, however, that Texas, even this part of it, is not a cotton country. The caterpillar has appeared in this county (Brazoria) for a longer period of years, and earlier in the season, than in any other part of the State; and yet there are planters here who, for twelve and fifteen years past, have averaged seven bales of 500 lbs. to the hand. Some years they have failed almost entirely, but the average has been made up by the over-production of favorable seasons. A bale of 500 lbs. to the acre is considered a fair crop, and the staple is thought equal, and would be, with careful handling, superior to that of Louisiana. The cotton seed is planted in rows from seven to eight feet in width, allowing two and a half to three feet in the drill—the wider distance I think preferable. More attention has been latterly paid to the procuring of good seed, and a fair proportion of the crop is this year planted in Mastodon and Petit Gulf seed, directly brought from Mississippi. The late spring of 1846, and the early appearance of the caterpillar, before the cotton had matured, caused fears as to the seed of last year, and led to a greater importation of that article than usual. The prospects of the present crop are encouraging. The worm appeared early in July, but as that month proved dry and warm they soon disappeared, and up to this date, September 1st, no serious injury has been sustained from them. Since the 1st of August there has been an average of 200 lbs. of seed cotton picked to the hand, and if the fall is dry and favorable, there will be an average of over 2,000 lbs. to the acre.

The experiments made in the cultivation of cane and the manufacture of sugar have been most successful, though no fair trial, testing the full capabilities of our soil and climate, has yet been had. The experiments have been incomplete, both in regard to the mode of culture and the process of manufacturing, the mills used being of the most ordinary kind, and the other machinery of corresponding value. Notwithstanding this, there was a yield last year of over two hogsheads to the acre of sugar of most excellent quality; and those of our planters who have turned their attention to this branch of agriculture are decidedly the most prosperous. This result has stimulated many others to go largely into the growing of cane, and their outfit and labor bids fair at the present time to be well rewarded. In my immediate neighborhood six sugar establishments, costing from 10 to $15,000 each, independent of brick and home labor, are being erected, and will be completed for the grinding of the present crop. From the experience of past years, no frost may be looked for that would injure the standing cane before or about the 1st of December, though the weather here during the *northers* is sometimes severely cold, the thermometer in December, 1845, and in January of this year, having fallen to 24° Fahr. Uninformed as our planters

were as to the best mode of putting up their seed cane, much of it was injured last winter by the cold, as also the ratoon, from not being covered with the stubble. In a wet winter both the plant cane and the ratoon would be materially preserved by the opening of suitable ditches, as water lying on or near the surface of the ground tends to rot the cane and expose it more to the severity of the temperature. In a level country like this, it cannot be too often reiterated—"drainage is manure." The sugar crop requires less labor, is more certain and profitable, than the raising of cotton, and if the production of the last year is sustained on future trial, most of the land in Texas bordering on the coast, or convenient to navigable rivers, will be planted in cane.

The area of country thus thrown open to the production of sugar, by a timely immigration from the more northern and cotton-growing regions of the South, where slave-labor has ceased to be remunerative, would in a few years supply the demand for that article, not only in the United States, but to a considerable extent abroad. The cheering fact is thus exhibited, that, no matter how rapidly the population of our common country may increase; no matter how far our northern brethren may stretch out and occupy their utmost limits, the annexation of Texas will have made the Union independent of foreign supply in this, one of the great and growing necessaries of life. Texas will always be a grazing and agricultural State, and in exchanging her staple productions, sugar and cotton, for the manufactures of the North, she will contribute a strong link to that chain which binds us as one people. Between the manufacturer of Massachusetts and the planter of Texas, there is destined to be an intercourse of mutual interests. Identified in language, in ancestry, in the love of free institutions (as applied at least to white men), they have now, for weal or for wo, a common fate, and an equal claim to the recorded glories of Bunker Hill and San Jacinto. But Massachusetts hitherto has been shy and cold. At every opportunity, fit or unfit, she has had her fling at Texas. At our admission into the Union, and since, she has spurned our offered olive branch. We now hold up to her a lump of sugar—if she rejects that, and throws cold water at us, in mercy let it be in *ice*.

Another leading staple of Texas is Indian Corn; and though the southern portion of the State is not the best adapted to its production, yet the crop is generally abundant, and in fair seasons, on good soil, an average yield of fifty bushels to the acre may be relied on. Seventy-five bushels to the acre have, for several successive years been raised on the cane lands of Oyster Creek, a small stream running parallel with the Brazos. But it can never be made an article of foreign export on account of the weevil, which frequently commences its ravages in the field, and always injures the corn in weight and quality. Various experiments have been made to destroy that insect or prevent its appearance, but as far as I can learn without success. The man who can discover a remedy against it would do almost as much service as one who could point out the means of destroying the caterpillar.

In addition to the great staples enumerated, tobacco, rice, millet, wheat, the vine in its varieties, indigo, hemp, oranges and other trop-

ical fruits—in fact anything that may be grown and cultivated in Louisiana may be made here an equal source of profit and support. Tobacco for cigars has been cultivated in our lighter soils, of a quality equal to any in the United States, though it must be admitted that the genuine *Havana flavor* is proper only to the island of Cuba. It is as utterly impossible to make a *Havana cigar* out of American tobacco, as that a Yankee grocer should counterfeit successfully the delicate wines of La Belle France.

Rice, if the season should be a wet one, or on land susceptible of irrigation, may be cultivated here, if not as an article of export, at least as a table luxury; and I have succeeded several years in making two crops from the same planting. Potatoes, the sweet and Irish, yield an abundant return for the labor bestowed on them; indeed, there is no part of the United States where an industrious man can live so easily, and in such abundance, as in Texas. Apart from the fertility of the soil, the mildness of the climate, and the rapidity with which vegetation matures, a never-failing support is to be found in our beautiful and boundless prairies. If a blight like that which has desolated Ireland should spoil the labor of the husbandman, a resource against famine might always be found in "the cattle upon a thousand hills."

As an illustration of the ease and abundance with which a laboring man in this country may support himself, I will refer to an instance which has this year come under my observation. The man to whom I allude, in January planted a small piece of ground in Irish potatoes. As soon as the crop matured, he dug the potatoes, and plowing the ground afresh, planted it in Indian corn; when the fodder was gathered, he threw up ridges between the corn rows and set out the sweet potatoe vine, which now promises an abundant crop. After digging his potatoes in the fall he intends sowing turnip seed on the same ground, thus realizing, as I think he will, four crops in the year. This is crowding too much on the land; it is what a jockey would call "riding a free horse to death;" but it proves what I set out to establish, that this is a good country for an industrious man—for a Yankee, a Scotchman, an Englisman, a German—for anybody but a drunkard and an Irishman.

The face of the country bordering on the coast and embracing the bottom lands of the Brazos and neighboring streams, is very flat, and indicates fever and ague, and all malarial diseases. But such is not the fact. The earth is easily and frequently covered with water; but either from the absorbing and porous qualities of the soil, or the rapid evaporation under a summer's sun, is as quickly dried off. It is generally therefore very wet or very dry, neither condition being unfavorable to health. Added to this circumstance, and it is perhaps the more important of the two, an invigorating sea breeze is regularly felt in the summer far into the interior. Whatever be the cause we only state the fact, that Brazoria county, in a low latitude, the richest in soil and with a general appearance fruitful of disease, is decidedly among the most healthy in the State. Instances of similar location and perhaps equal health are found on the bayous near the sea-coast in Louisiana. In May of the present year the highest range of the thermometer was 85° the lowest 66° Fahr. The hottest day I have

felt during the summer was on the sixth day of August, when the mercury rose to 89° in the shade. At the greatest heat I suspended the thermometer on a post exposed to the sun, when the mercury rose to 98°. Fanned by a regular sea breeze in a temperature so even, diseases originating from climate are of rare occurrence and of the mildest type.

The valley of the Brazos for a distance of five hundred miles from the coast, following the windings of the river, is unsurpassed in richness and variety of soil by any equal extent of country in North America. The river at a low stage of water is only navigable for sixty miles, but by the removal of slight obstructions at four points, could be made navigable for steamboats of light draught to Washington, three hundred miles by water from the mouth. Velasco, situated at the outlet of the river, is now a summer retreat for the planters in the interior, exhibiting no trace (except in ship building) of its former enterprise and trade. It was once, until Galveston bore away the palm, the principal shipping port in Texas, and but for the shallowness of water on the bar, would be decidedly the most eligible point on the coast for a large commercial town. It has a safe and excellent harbor, and after crossing the bar twenty feet water may be found for many miles up the river. The bar is narrow about 800 yards from the shore, and varies in depth from six to eight feet. It is thought by those captains who have sailed into this port that the channel might be permanently deepened to twenty feet water. A scientific examination by competent engineers has never been made, and it would be well for the general government to direct a special survey for that object, as there is live oak enough on the Brazos river to supply the wants of the navy for a century. If the deepening of the bar is at all practicable, it would be truly a national object, and it is at least worthy an examination. Texas is very deficient in harbors accessible to the lighter class of war vessels, and if artificial means can be employed to supply that deficiency, there is no point at which the attempt can be made with better prospect of success, or with more general advantages than at the mouth of the Brazos. The trade of this river, covering as it now does and will the heaviest shipment of cotton and sugar made near any other stream in Texas, requires a better outlet than over the bar as it now is; and a company, at the head of which is General Hamilton, of South Carolina, are engaged in cutting a canal from a point on the Brazos river twenty miles above its mouth to Oyster Creek, and thence into Bastrop bay, intending San Luis as the outlet. That section of the canal to Bastrop or San Luis bay will be completed this winter.

But little is known about the head waters of the Brazos. I doubt if its source has ever been explored by a white man. It is a muddy, uninteresting stream, its margin thickly studded with evergreen, and from its precipitous sides presenting rather the appearance of a large ravine during a freshet, than the gushing waters of mountain origin. Its banks will never be like those of the Rhine, the birthplace of poetic inspiration. The water is unfit to drink, and those who from necessity use it, frequently suffer in health. Its main branch is fed high up by innumerable streams contributing their ingredients to form as it would seem a most villainous beverage. Among the many

creeks or small rivers emptying into the Brazos, are the "Limestone fork," "the Salt fork," the "Sulphur fork," and the "Alum fork."

By the way, in the summer of 1844, after a freshet in the river which had partially subsided, the water from being very red and muddy became suddenly clear; the impurities were deposited at the bottom, and fish could be distinctly seen at the depth of over ten feet. The phenomenon created some alarm, and was only explained on the supposition that there was a rise in the "Alum fork" branch; at least we were all content to attribute it to that cause.

But, sir, I am traveling beyond my limits. I set out with the intention of publishing in your valuable periodical the statistics of Brazoria county; I am unable fully to complete my design. The following statement (though correct as far as it goes, and taken from the books of the assessor) is still incomplete, as he has not yet finished his labors.

BRAZORIA COUNTY, TEXAS.

White population	1,502
Negro "	2,908
Cattle	23,276
Horses	1,517
Acres in sugar-cane	2,600
" in cotton	7,054
" in corn	4,795
" in sweet potatoes	320

The present flattering appearance of the crops warrants the following calculation as to the production; the price, of course, may vary with the fluctuations of trade:

2,600	acres in cane, producing	1,500 lbs. sugar per acre, at 6 cts. per lb.*	$234,000
7,054	" in cotton, "	500 lbs. ginned cotton per acre, at 10 cts.	352,700
4,795	" in corn "	40 bushels per acre, at 40 cts. per bu.	76,720
320	" in sweet potatoes,	pro. 300 bu. per acre, at 25 cts. per bu.	23,000
			$686,420

This exhibit does not include Irish potatoes, peas, beans, rice, millet, fodder, oats, and tobacco, all of which are cultivated to some extent. These items, with the molasses from the sugar crop, would swell the aggregate production of the county to at least $750,000. If there is another county in the United States of equal population whose strictly agricultural statistics present so fair a showing, we waive our claim to the *Banner* without a murmur.

* A friend writes us from Texas a few weeks ago: "The crops of cotton, sugar, and grain are No. 1. In the sugar district, that is, the coast country, they will make 3,000 hogsheads of sugar." Hurrah for Texas!

Art. VI.—PROGRESS OF AMERICAN AND FOREIGN COMMERCE. AGRICULTURE AND MANUFACTURE.—No. II.

RETROSPECT OF THE YEAR 1846–47—REVULSIONS IN ENGLAND—BRITISH CORN TRADE—AGRICULTURE OF GREAT BRITAIN—PROSPECTS OF FUTURE CROPS—FOOD ON THE CONTINENT OF EUROPE—POTATO YIELD—HARVESTS—BRITISH PRODUCE MARKET—MONEY MARKET OF EUROPE—COMMERCE OF THE UNITED STATES, 1846–47—EXCHANGES—AMERICAN FINANCES—AMERICAN PRODUCE MARKET—UNITED STATES EXPORTS, IMPORTS AND DUTIES.

THE year which has elapsed has been fraught with events of the highest interest to the commercial world, and has afforded singular evidence of the strength and independence of the position occupied by the United States, as compared with that of Great Britain. That country from a condition of great apparent prosperity in the summer of 1846, has been in a few short months plunged in an extremity of distress, that for a time threatened even the stability of the existing social order of the empire. The fact that the leading commercial nation of the world is exposed to such sudden transition and awful reverses, no matter what may be the immediate cause, while the United States has, since the general explosions of the paper system in 1837, recovered its elasticity and steadily progressed in a prosperity which it is not easy to shake, affords evidence of vital decay in the commercial affairs of the Empire. In the summer of 1846, England was rich in the precious metals to an unexampled extent, her available capital, as represented in stocks of all descriptions of goods and produce, larger than ever before—provisions abundant and cheap, and the people well employed and prosperous. In a few short months the inhabitants of the islands were starving by thousands, the corn laws and navigation act, which had been undisturbed for nearly two centuries, were, in respect to them, repealed; stocks of goods had become nearly exhausted, exchanges were against England, half the bullion gone from the country, her merchant princes failing by scores, the rate of interest advanced to a point never reached since the reign of Queen Anne, and the very solvency of the government apparently at stake. This terrible revulsion is ascribed to many causes, the chief of which are, the failure of the crops, the railroad expenditures, and the action of the new bank charter bill. There is no doubt but the first two of these are main causes of the disastrous revulsion which we have witnessed, and as far as the insufficiency of the crops goes, is not only an incurable one, but one which recurs with increasing frequency and severity, and which must annually be of greater importance in its effects. It was not until toward the close of the last century that Great Britain ceased to be an exporter of grain, and not until after the close of the American Revolution did the importation exceed the exports to any serious amount. The events of the French war doubtless interfered to a considerable extent with her agriculture. The years 1800 and 1801 were of deficient harvest, and the first in England's history of large importations of breadstuffs. In these two years the harvests were short, and it was found that the population being 10,472,048, a bad harvest was

insufficient to feed it without an importation of 2,409,445 qrs. in each year. Ireland, at that time, had not begun to yield supplies; but the importation commenced with the union, and has gradually progressed, until, since 1828, about 3,000,000 qrs. per annum have been derived from Ireland. Since then, at each recurrence of a bad harvest the demands for foreign supplies have been more extensive, the wants of the population encroaching upon the capacity of the islands to feed them, until even in years of good harvests they do not yield sufficient without foreign aid, and every succeeding variation from the utmost capacity of the soil to produce, is productive of greater distress. The year 1816 was one of short harvest, and the distress was very great. From that time to the present England has never ceased to import largely.

IMPORT OF WHEAT AND WHEAT FLOUR INTO GREAT BRITAIN, NATURE OF HARVEST, BULLION IN BANK, AND POPULATION OF THE UNITED KINGDOM.

Years.	Harvest.	Imported—qrs.	Price of wheat.	Bullion in Bank.	Population.
1816	scarcity	332,491	78s. 6d.	4,640 880	19,826,571
1817	average	1,089,855	96s. 11d.	9,680,920	20,092,734
1818	"	1,694,261	86s. 3d.	10,055,460	20,362,511
1819	short	625,638	74s. 6d.	4,184,620	20,635,870
1820	abundant	996,479	67s. 10d.	4 911,050	20,912,899
1821	average	707 384	56s. 1d.	11,869,900	21,193,548
1822	"	510 602	44s. 7d.	11,057,150	21,482,931
1823	short	424,019	53s. 4d.	10,384,230	21,776,265
1824	average	441,591	63s. 11d.	13,810 060	22,073,604
1825	not an average	787,606	68s. 6d.	8,779,100	22,375,003
1826	average	897,127	58s. 8d.	2,459,510	22,680,518
1827	"	711,868	58s. 6d.	10,159 020	22,990,205
1828	scarce	1,410 300	60s. 5d.	10,347,290	23,304,120
1829	average	2 190 095	66s. 3d.	6,835,020	23,622,322
1830	"	2,205,751	64s. 3d.	9,171,000	23,944,868
1831	not an average	2 868 860	66s. 4d.	8,217,050	24 029,702
1832	abundant	1,254,351	58s. 8d.	5,293,150	24 603,177
1833	"	1,166,457	52s. 11d.	6,520,130	24 939,116
1834	"	981,486	46s. 2d.	6,781,000	25,279,642
1835	"	750 808	39s. 4d.	6,305,000	25,624,817
1836	"	861,156	48s. 6d.	4,511,110	25 974,705
1837	short	1,109,492	55s. 10d.	7 251,130	26,129,371
1838	scarce	1,923,400	64s. 7d.	9,362,000	26 288,879
1839	short	3,110,729	70s. 8d.	2 887,000	26,350,170
1840	average	2,526,645	66s. 4d.	3,557,000	26,443,495
1841	"	2 923,189	64s. 4d.	5,031,000	26,711,694
1842	good	2 927,985	57s. 3d.	11,054,000	27,005,521
1843	"	1,072,120	50s. 1d.	13,933,000	27,302 581
1844	"	1,377,996	41s. 4d.	14,886,352	27 602,908
1845	"	1,147,649	48s. 2d.	13,268,771	27,906 539
1846	"	2,394,531	58s. 2d.	16,353,848	28,213,510
1847 (6 mos.)	"	1,476,488	90s. 1d.	9,253,180	28,523,858

This table embraces the wheat and wheat flour only, imported from foreign countries, and taken into the consumption of Great Britain in the thirty-two years, during which 9,000,000 people have been added to the population. Since 1839, the wheat harvest has been good, and was so last year. It will be observed, that for the ten years ending with 1830, during which some 3,000,000 were added to the number of the inhabitants, that the increase of food produced in the islands must have been very great; inasmuch as that the impor-

tation was not large, and prices not high. During the bad harvests of 1829–30–31, the quantity of food per annum imported was immense; but, from 1832 up to 1838, the quantity imported was small, showing a great abundance of home grown corn. A considerable portion of the increase was derived from Ireland, and from the improved system of culture, notwithstanding the low prices that ruled in those years. Since the harvest of 1837 failed, the importations have been large, notwithstanding, that since 1839 the English wheat harvests were good. Now, it is apparent that the production of grain must have been very extensive to meet this large increase of demand through the increased numbers of the population, or that some other article of food has entered more extensively into the consumption of the working many. In M'Culloch's statistic account of the empire, the quantity of land in the United Kingdom is given as follows:

	England.	Scotland.	Ireland.	Total acres.
Arable and gardens..... acres	11,143,370	2,553,725	8,000,000	21,697 095
Meadows, pastures, and marshes	17,605,630	2,489,725	6,603,000	26,698,355
Total acres.....	28,749,000	5,043,450	14,603,000	48,395,450

These lands are estimated to be distributed in agriculture, as follows:

	England.	Scotland.	Ireland.	Total.	Prod. per acre.	Yield.
Wheat	3,800,000	220,000	500,000	4,520,000	26 bu...	117 520 000
Barley and rye...	900,000	280,000	200,000	1,380,000	32 bu...	44,160,000
Oats and Beans ..	3,000,000	1,375,000	1,100,000	5 475 000	64 bu...	350 400,000
Potatoes & turnips	1,200,000	200,000	2,000,000	3,400,000	9 tons..	30,600,000

Now, it is evident, that if this product was sufficient for 20,912,899 persons in 1821, it could not have been sufficient for 28,523,858 in 1847, without a very material increase in breadth of land, and improvement in agriculture; both of these have taken place to some extent, and have so far increased supply, that when all the crops are good as in 1844, but little wheat is needed from abroad. The increase of the culture of wheat is, however, by no means equal to the increased consumption of food, the demand for which must at least have kept pace with the swelling numbers of the people, and also by an increased consumption *per head*. A considerable increase took place in the supply of grain from Ireland, that is to say, in 1820, 1,415,000 qrs. mostly oats, were received from that quarter, and was increased to 2,855,000 qrs. in 1842.

The principal means by which the supply of wheat has been eked out, has been in the increased use of potatoes and coarser food by the people. Owing to the superior yield of potatoes, it is known that one acre planted with them will support as many persons as *three* acres planted with wheat, or as four planted with oats. Therefore, if all the arable land being planted with wheat, supported a certain number, say 20,000,000, it would, if all planted with potatoes support 60,000,000, and in that proportion, according to the land planted with potatoes. Exactly in this proportion, also, would the distress produced by a failure of potatoes be increased, and on the abandonment of that crop, the difficulty of returning to grain be enhanced. When wheat is high its consumption will be diminished, and potatoes and coarse grains substituted. As every acre cultivated with potatoes will yield

three times the human food that can be derived from one planted with wheat or oats, the dependence upon that crop has become very great, and the increase of its culture has enabled the manufacturing population to swell in numbers, where, had they been confined to wheat, the same land would have sufficed for one-third only of the people actually subsisted. During the years 1845–6, the potatoes and coarse grains of England failed, and the wheat crop was *good*. The great revulsion of the year 1839, was produced by the shortness of the wheat crop—the coarse grains not being so much affected. The consumption of the different kinds of imported grain was in each of those years as follows:

FLOUR AND GRAIN IMPORTED INTO ENGLAND.

	1839.	1846–7.		1839.	1846–7.
	qrs.	qrs.		cwt.	cwt.
Wheat	2,521,191	2,520,793	Wheat flour	665,692	4,824,875
Barley	594,485	846,166	Oat and barley meal	574	36,989
Oats	864,240	1,144,531	Indian meal	1	386,293
Rye	152,521	18,474	Buckwheat meal	....	296
Peas and Beans	293,262	566,407			
Maize	14,528	1,802,384			
Buckwheat	1,916	37,975			
Total	4,642,063	6,936,730	Total	666,267	5,248,453
			Equal to qrs.	189,884	1,499,000

The whole consumption of 1839 was, it appears, equal to 4,831,947 qrs., and of 1846–7, 8,435,730 qrs. The importation of 1839, supplied the actual wants of the people, while those of 1846–7 did not prevent famine to an alarming extent. This affords singular evidence of the degree in which potatoes and the coarse grains enter into the consumption of the people. If we compare prices of 1839 with those of May, 1847, we observe that a large foreign supply failed to depress them.

	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
1839	70*s.* 8*d.*	39*s.* 6*d.*	25*s.* 11*d.*	42*s.* 0*d.*	41*s.* 3*d.*	41*s.* 2*d.*
1847	102*s.* 5*d.*	56*s.* 5*d.*	36*s.* 3*d.*	73*s.* 11*d.*	59*s.* 10*d.*	59*s.* 3*d.*

With a foreign supply nearly doubled, the prices remained 50 per cent. higher than in 1839.

These are the terrible results of a failure of the potato crop, when the wheat harvest was good. The year 1839 was one of the highest prices and most disastrous results since the year 1819, and in seven years has recurred a failure of still greater magnitude. The population has increased in that time over 2,000,000 in number, and their ability to consume more food per head was enhanced in 1846–7, through the enormous railroad expenditure; yet the probability is that they did not eat more than they required. The effect of the potato failure has been to diminish, if not nearly destroy, confidence in that root; so much so, that it has been calculated that the planting of the present year has been 1,006,663 acres, instead of 3,400,000 acres, the usual quantity. The 2,400,000 acres thus changed from potatoes to other food, will support only one-third the number of people that they did under potatoes—that is to say, for example, if planted with potatoes they supported 12,000,000 people, they will sustain under other crops but 4,000,000; or in other words, to produce the same quantity of human food obtained from 2,400,000 acres

in potatoes, will require 7,200,000 in other crops; a quantity not to be supplied in the islands. These means of England's hitherto continued prosperity, under the swelling numbers of her people have suddenly failed, and she feels the excess of a population beyond what her soil will support on grain and coarse crops. This is the great difficulty against which she has to contend. That Europe can be supplied with food from the United States and Europe to almost any extent, is true; but her people must still earn it in some shape; and if in manufactures, it must be in such articles as the corn countries want, and they must be supplied to them cheaper and better than they themselves can make them. Her ability to do this is fast leaving her. Her vast natural advantages and great capital have hitherto enabled her to maintain her manufacturing superiority, but only through constantly declining prices, underbidding the world. When, however, money and food is cheap on the Continent and in the United States, and these articles are comparatively higher in Great Britain, through the necessity of importing a large proportion of food, the chief advantages that she has hitherto enjoyed will be lost. Manufacturing enterprise is in full activity in Europe, as in the United States, and all those countries are rapidly rivaling England in the branches of her peculiar industry, and becoming less dependent upon her for goods, while she is become daily more so upon them for food.

As this matter of food is the main cause of the financial difficulty which has overtaken England, and presents but little prospect of remedy, the future has an unpromising aspect. That the crisis has been heightened by the vast expenditures in railroads is doubtless true, inasmuch as that the floating capital of the country has been locked up in those fixtures, and the great outlay of money has enabled the people to consume a greater quantity of exchangeable commodities, while they have produced less. To ascribe these results to the working of any particular banking system, as the politicians of England are now doing, is but to regard the matter in a superficial view. The difficulty is an actual over-consumption of floating capital, produce, and goods, at a time when Nature has refused her usual supply. No system of *credits* could supply this deficit; on the contrary, the greater the amount of outstanding obligations when the crisis came, the more wide-spread and disastrous would have been the results.

For the coming year the best estimates make the English supply of food about equal to the last, supposing that what acres are planted with potatoes should show no disease. Hence her wants from abroad will be as large. Throughout Europe the crops are universally represented as abundant; but inasmuch as the stocks of old corn were supposed exhausted last year, the supplies of this will not more than make good those stocks, and the chief supplies of England will probably come from this country, more particularly should she continue the navigation laws suspended, in order that a free supply of vessels may permit the means of transport at low freights through the winter and spring, when the ports of the north of Europe are closed. No matter how great soever may be the crops of the interior of Europe, they cannot be harvested and reach market before the winter sets in, and will therefore not be available in England until the spring. One

great cause of the large consumption of food and foreign produce will be continued, viz.: the railway expenditure. It appears from official statements that the calls and loans authorized for railways at the two sessions of 1845–6, were £124,675,655—say $600,000,000. The portion of this actually raised and spent down to August, 1847, was £28,320,020, leaving £96,355,635 yet to be raised by companies, the directors of which still avow their determination to complete the lines by May, 1849. In addition to this there are projects to be acted upon by the next Parliament, to authorize the expenditure of £34,161,674 on roads already opened, and £16,325,000 on new lines. Of these, probably £24,000,000 will be authorized, and the whole will require the outlay of £1,200,000, or $6,000,000 *per week for* 120 *weeks*. If the expenditure of £28,320,020 has aided in the production of the present unparalleled state of the London money-market, what will be the effect of the outlay of £60,000,000 more in the coming year? The *possibility* of effecting this expenditure is very questionable. In order to observe the effect of conflicting causes on the consumption of foreign products in England, we may compare the quantities of certain articles taken into consumption in Great Britain in 1838–9, and in the first six months of 1846–7, when the pressure was highest.

IMPORTS AND EXPORTS OF GREAT BRITAIN FOR THE YEARS 1838 AND 1839, AND SIX MONTHS OF 1846 AND 1847.

Imports.	1838.	1839.	Decrease.	1846.	1847.	Increase.
Cattle, No. ..	.... ..	.... ..	.... ..	26,877..	61,989..	35,112
Provisions, cwt.	.... ..	.... ..	.... ..	127,666..	244,601..	116,935
Butter, cwt...	251,592..	213,328..	38,264..	107,828..	168,049..	60,221
Cheese, cwt..	217,296..	201,391..	15,905..	127,480..	174,122..	46,642
Coffee, lbs. ..	25,765,673..	26,789,945..	.... ..	20,024,706..	24,685,173..	4,660,467
Sugar, cwt...	3,909,665..	3,825,599..	84,066..	2,426,193..	2,965,399..	539,206
Rum, gals. ..	3,135,651..	2,830,263..	305,388..	1,190,836..	1,555,561..	344,625
Brandy, gals.	1,203,435..	1,167,756..	35,679..	575,677..	710,221..	134,544
Tobacco, lbs.	23,149,726..	22,773,905..	375,821..	13,239,248..	13,307,975..	68,727
EXPORTS...	£50,060,970..	53,233,580..	....	£25,020,972..	25,394,243..	373,271

In 1839, when, through the large importation of corn, as seen in the above, the Bank of England had its bullion reduced to less than £2,500,000, and raised the rate of interest over 5 per cent., thus, for the first time, availing itself of the modification of the usury laws, the effect was to check the consumption of all foreign produce and domestic goods, and, therefore, to promote the exports of English goods, favorably affecting the exchanges, and restoring the tone of the money-market. This year the large railway expenditure has counteracted that movement, and the consumption of all produce has been promoted, as well by the large wages paid to the people, as by the reduction of the duties and excise under the policy of 1842, while the scarcity of raw materials has checked the manufacture of goods and thereby lessened the exports. The severe pressure which has taken place on the continent of Europe for food, has greatly decreased the demand for English goods. The large crops and probable low prices which will prevail in Europe this year, must ultimately stimulate a demand for English manufactures, and by so doing tend to support her exchanges in face of large continued imports of produce. The condition of the money-market of Europe does not appear, how-

ever, to be flattering. The rate of money at Hamburg and at Frankfort-a-Maine, was 4½ per cent. and rising; but the finances of France were gloomy. A loan for 370,000,000f. was announced by the French government, and its approaching payment hung gloomily over all the financial circles, while the aspect of the political horizon in all quarters was by no means such as to impart general confidence.

The result of the year's business in England had been productive of a panic as great, perhaps, as ever before was experienced. The continued efflux of bullion had compelled the bank to raise the rate of interest successively to 4¾, 5 a 5½ per cent., as the *minimum* rate of discount for 30-day bills, and the pressure so produced had precipitated a fall in breadstuffs, involving the insolvency of many eminent firms, mostly in the corn-trade, whose outstanding liabilities were estimated at over £3,000,000. The currency of the kingdom was indeed far from satisfactory, being as follows:

	1846. (*April* 24.)		1847.	
	Notes.	Specie.	Notes.	Specie.
Bank of England	20,311,148	13,682,636	20,082,824	9,664,298
Private banks	4,656,134	....	4,725,315	....
Joint Stock banks	3,264 489	....	3,301,057	....
Scotch banks	3,096 317	1,187,240	3,395,521	1,290,626
Irish banks	7,572,323	2,106,850	6,521,234	1,992,545
Total	38,900,401	16,976,726	38,025,954	12,947,469
Decrease on year	....	....	874,447	4,029,257

	1846. (*July* 17.)		1847.	
	Notes.	Specie.	Notes.	Specie.
Bank of England	20,367,435	15,899,093	18 648,245	10,232,051
Private banks	4,410,325	....	4,339,088	....
Joint Stock banks	3 089,431	....	3,034,021	....
Scotch banks	3,390 060	3,414,183	3,495,921	2,777,160
Irish banks	6,686,491		5,257,378	
Total	37,943,746	19,313,276	34,774,623	13,009,211
Decrease on year	....	....	3,169,123	6 304,065

This is an important decline in the currency of Great Britain, and it was still farther reduced by the export of £1,000,000 to Europe and the United States up to August 7, when the panic was at its height. The probability is that the return of low prices on the Continent by reason of the good harvests, would affect still more unfavorably the English exchanges, but for the violent fall in breadstuffs produced immediately by the bank action in the first week in August, and continued to the close of that month. It may be inferred, however, from the low state of the currency indicated in the above table, as compared with last year, simultaneously with low prices of manufactured goods, that the prices of produce were but little inflated by speculation, but that short supply and effective demand had alone sustained them at so high a level.

The business of the United States has remained surprisingly firm and steady in the face of the great fluctuations that have overtaken the English markets. In a former number we remarked on the comparative stability of commercial affairs in the United States, since the proportion of specie in circulation had been enhanced, and the floating credits diminished. The large exports of farm produce to England of this year have afforded a safe basis for a large amount of

sterling bills, which have ruled low throughout the year. These bills are drawn against the actual produce, and not against credits, as was the case in former years, and although they have been in the last month affected to a considerable extent through the fall in the prices of produce in London, they have not been subject to dishonor by a mere capricious withdrawal of credit connected with United States produce, although London merchants have been struck down by the ruthless action of the bank. From the 1st of September last year, when cotton began to rise in value by reason of the short crop, and the supply of bills was enhanced through the extensive export of farm produce, foreign bills began to decline, and continued to do so down to the packet of April 1st, when they reached the lowest point, as follows:

RATES OF FOREIGN BILLS IN NEW YORK, SEMI-MONTHLY BY THE STEAMERS.

	Sterling—*l.*	Paris—francs.	Amsterdam—flor.	Antwerp—flor.	Hamb.—marcs.	Brem. rix $
Sept.	1.8¼@9	5.31¼@5.30	39⅛@39¼	39⅛@39⅜	35¼@35⅜	78¼@79
"	15.9 @9½	5.30 @5.28¾	39⅜@39½	39½@39⅝	35¼@35½	78¾@79
Oct.	1.8¼@9	5.30 @5.28½	39⅛@39¼	39⅛@39½	35 @35¼	78 @78¼
"	15.8 @8½	5.31⅞@5.30	39 @39⅛	39⅛@39¼	34⅞@35	78 @78¼
Nov.	1.6¼@7½	5.37½@5.32½	38⅞@39	38⅞@39¼	34⅛@35	76¾@77½
"	15.6¼@7½	5.40 @5.37½	38⅝@38⅞	38⅝@39	34⅛@35¼	77¼@78½
Dec.	1.6¼@5⅞	5.41¼@5.40	38⅛@39	38⅛@39	34⅛@35	77⅛@77½
"	15.5⅞@6½	5.42½@5.41¼	38⅛@39	38 @39	34 @35	77⅛@77½
Jan.	1.5 @5½	5.45 @5.42½	38⅛@38⅞	38⅛@38⅞	34⅛@34⅝	77 @77½
"	15.5¼@6	5.43¾@5.42½	38⅝@39	38⅛@39	34⅛@34½	77¼@77½
Feb.	1.5¾@6½	5.40 @5.37½	39⅛@39¼	39⅛@39¼	34⅛@35	77⅛@77¾
"	15.5½@5¾	5.40 @5.38¾	39⅛@39¼	39⅛@39½	34⅛@35	77¼@77¼
Mar.	1.4¾@5½	5.41¼@5.40	39⅛@39¼	39⅛@39½	34⅛@35	77½@78
"	15.3½@4½	5.45 @5.43	38⅛@38⅝	38⅛@38⅞	34⅛@34⅞	77⅛@77½
Apr.	1.3½@4½	5.48¾@5.45	38⅛@38⅝	38⅛@38⅞	34⅛@34⅞	77⅛@77¾
"	15.5 @5¾	5.43½@5.42½	38⅜@38⅝	38⅛@38⅝	34⅛@35	77¼@77¾
May	1.6 @6¼	5.36¼@5.35	39⅛@39⅜	39⅛@39½	35 @35⅜	78 @78⅜
"	15.6½@7¼	5.32½@5.30	39⅛@39½	39⅛@39⅜	35⅛@35¼	78 @78½
June	1.6½@7¼	5.31¼@5.28½	39⅛@39½	39⅛@39⅜	35⅛@35¼	78¼@78½
"	15.5½@6¼	5.33¾@5.32½	39⅛@39⅜	39⅛@39⅜	35 @35⅛	77⅞@78¼
July	1.5⅝@6¼	5.32½@5.31¼	39 @39⅛	39 @39¼	34⅞@35¼	77⅝@78¼
"	15.5½@6½	5.32½@5.31¼	39 @39⅛	39 @39½	35 @35¼	77¼@78
Aug.	1.5½@6½	5.33¾@5.32½	39⅛@39¼	39⅛@39½	34⅞@35¼	77 @78
"	15.6 @6½	5.33¾@5.32½	39 @39⅛	39 @39⅜	34 @35¼	77⅛@78
Sept.	1.6½@7	5.31¼@5.30	39⅛@39¼	39⅛@39¼	35¼@35⅜	78 @78¼
"	15.8½@9	5.26¼@5.25	39⅜@39⅝	39⅜@39⅞	35¼@35⅝	78⅛@79

The rates of April 17 were 3½ a 4½ per cent. in New York, and 1 a 2½ per cent. in New Orleans; lower than has been known to be the case for many years; and the influx of specie from England to the United States continued large up to that time, when it had begun to excite uneasiness on the part of the bank, so much so that that institution took measures by refusing to discount bills to check it, and this had the effect of sending the rate up to a point which nearly stopped the farther movement of specie. The steamer which left England May 4, had on board £255,000 of specie. The shippers of £105,000 of this amount were, however, induced again to land it before she sailed, under the representations of the Bank of England.

The legitimate effect of a refusal to discount United States 60-day bills of exchange under such circumstances, would have been to depress the price here for 60-day bills, because they being unavailable for 60 days, they were less valuable as a prompt remittance. The

importation of goods, however, began to increase, and the demand for bills from this circumstance, aided by the large quantities of specie which had been already received, raised the rate.

The continued large shipments of produce, however, again flattened the market, and the packet of August 1st brought £70,000, and that of the 19th £30,000, with indications that should sales of produce continue after the new cotton crop began to go forward, farther and larger demands for specie would be made, more particularly that the prices of breadstuffs continued very high, in the face of falling markets on the Continent, the exchanges being already in favor of Europe. With the specie taken for the United States August 1, the amount drawn out of the bank was some £500,000, for the last week in July, a state of things that called for prompt action on the part of the Directors, who, by putting up the rate of interest suddenly to 5½ a 6½ per cent., took the surest means of checking farther exports of specie. The movement produced a panic in the London markets, a large fall in the prices of corn, and extensive failures among the dealers. Although a large amount of American bills was in consequence dishonored, but few came back, being protected by friends. The demand for bills, to cover their non-accepted bills, by the packets of the 1st and 16th of September, however, caused such an advance in the rates in New York, as almost to endanger a re-shipment of coin.

The failures in London were the remote cause of the stoppage of the oldest bill and banking house in New York, that of Prime, Ward, & Co., formerly Prime, Ward, & King—James G. King having retired last spring from the firm. The liabilities of the house are between two and three millions. The house enjoyed the highest character for many years, and was the recipient of a large amount of deposits from neighboring banks, and from individuals. It appears that their advances on New Orleans produce in the latter part of the season had absorbed a large margin, and bills to a considerable amount were running on Giles & Co. of London when that house stopped under "the screw" of the bank. Messrs. Baring, however, holding bills of lading, covered the bills. The news of the dishonor of the bills, however, induced the withdrawal of deposits here, and weakened the house at the moment when some stock speculations, terminating unfortunately, required all their means. By a succeeding packet it was reported, that bills of which acceptance had been refused by Overend, Gurney & Co., were finally honored. There were rumors unfavorable to the standing of certain banks and houses growing out of this failure, but apparently unfounded.

These fitful and spasmodic actions of the British bank produce individual disaster, but cannot be of general benefit. If the corn-dealers who were so unceremoniously struck down had been forcing importation of food on speculation, and through too great facilities granted by the bank for its own profits, the fault was in granting those facilities; but if the importation was regular, and such as is demanded by the actual wants of England, the bank cannot, by inflicting temporary ruin upon a few houses, stay the ultimate importation to its fullest extent. If the cause of the adverse exchanges is the great excess of consumption of foreign goods beyond exports, growing out of deficient harvests and great absorption of capital in railroads, the remedy

is only to modify those expenditures. It is not by ruining the importer of the produce that the matter can be reached. In fact the Bank of England seems rather to be a government machine than a commercial institution, inasmuch as that in all cases it displays a willingness to sacrifice merchants rather than to put restraints upon the government financial operations; its subserviency to the latter has frequently been a remote cause of commercial disaster.

The large and generally profitable sales of American produce abroad, have been the healthy basis of an extended and active fall trade. The importations have been large, yet the stocks of goods in New York are low and more broken in assortment than usual. Both domestic and imported goods have met with extensive and lucrative sales.

The progress of the import trade as the season advanced, and its effect upon the government revenue, are indicated in the following monthly table of importations and duties at the port of New York:

IMPORTS AND DUTIES AT THE PORT OF NEW YORK MONTHLY.

	1847.				1846.	
	Specie.	Free Goods.	Dutiable.	Duties.	Dutiable.	Duties.
December..	$61,346..	$537,496..	$4,279,813..	$1,143,327..	$3,499,991..	$1,056,896
January...	90,874..	478,443	5,499,682..	1,434,836..	4,842,881..	1,471,845
February..	1,235,122..	285,128..	5,889,387..	1,495,716..	4,177,952..	1,255,651
March	1,329,458..	786,937..	6,060,746..	1,652,092..	8,657,793..	2,608,734
April.....	3,397,064..	1,987,033..	8,339,429..	2,109,405..	4,105,393..	1,373,752
May.....	1,326,697..	738,753..	5,868,261..	1,487,172..	4,160,300..	1,268,052
June.....	547,813..	401,358..	5,689,109..	1,444,771..	4,605,527..	1,462,198
July	294,219..	861,518..	7,950,602..	2,068,335..	5,411,595..	1,651,652
August....	195,155..	404,290..	12,974,196..	3,412,635..	7,585,427..	2,168,639
Total....	8,467,748..	7,480,956..	62,551,225..	16,249,289..	48,986,862..	14,317,419
Increase...	7,946,239..	....	13,564,363..	1,931,870..	.... ..	....
Decrease...	....	1,335,661..	.... ..	.... ..	.... ..	....

It is observable that the specie import, which was large at this port in the four months ending with May, was small during the three months ending with August. By far the largest proportion of the specie imported into the country arrived, however, at Boston, by the Cunard line of steamboats; and at the two ports, probably, the amount reached over $30,000,000. The imports and duties for the month of August are the largest ever known at this port in one month. The figures do not include the quantities sent into warehouse, which are mostly of those goods, as wines, sugars, silks and dry goods, that are charged with the highest duties. The present tariff, at this port, has yielded near two millions more, during the nine months it has been in operation, than did the old for a corresponding period. This fact is, however, to be ascribed, doubtless, in some degree, to the large sales of produce abroad, the returns of which must necessarily come back to the country in some shape. In the early part of the year, when money was abundant in England and goods low here, it came as specie. Gradually, as the extensive sales of produce promoted internal prosperity, a demand for goods sprung up and dutiable articles have taken the place of specie. This operation will probably be still more extended for the coming year, and united to the favorable state of the continental markets, may so promote the demand for Lancashire goods for export as to compen-

sate, in some degree, the unfavorable prospect for the English home trade. The recent unfortunate termination to the attempt to restore peace in the Rio Plate river, will however, probably, operate adversely to the English cotton trade.

The cotton year having closed, the crops make up, as compared with former years, and showing the product of each locality, as follows:

COTTON GROWN IN THE UNITED STATES FOR FIFTEEN YEARS.

	N. Orleans. bales.	Mobile. bales.	Florida. bales.	Georgia. bales.	South Carolina. bales.	N. Carolina, Va. & Texas. bales.	Total. bales.
1828–29	264,249	79 958	4,146	249,166	168,275	104,021	870,415
1829–30	354,024	102,680	5.787	253 117	188,871	72.412	976,854
1830–31	426,485	113.186	13,073	230,502	185,116	70.435	1,008,847
1831–32	322.635	125,921	22,651	276 437	173,872	65,961	987,477
1832–33	403.443	129,366	23,641	271,025	181.879	61,087	1.070,438
1833–34	454.719	149,978	36,738	258,655	227,359	76.945	1,204,394
1834–35	511,146	197,692	52.085	222,670	203,166	67 569	1,254 328
1835–36	481,536	226,715	79,762	270,220	231,237	61,257	1,361,628
1836–37	601,014	232,243	83.703	262,971	196,377	46,665	1,422,968
1837–38	731,256	9.807	106,171	304,210	294 334	55,719	1,801,497
1838–39	584 994	251,742	75,177	205,112	210,171	33,336	1,360 532
1839–40	956,922	445,725	136,257	292,693	323,194	33,044	2,177 835
1840–41	820,140	317,642	93,552	149,000	225,953	28,669	1,634,945
1841–42	727,658	318,315	114.416	232,271	260,801	30,750	1 684,211
1842–43	1,060,246	481,714	161,088	299,491	351,658	24,678	2 378 875
1843–44	832.172	467 990	145.562	255,597	304,870	24 218	2 030,409
1844–45	929,126	517.196	188,693	295,440	426,361	37,687	2,394 503
1845–46	1.037,144	421.966	141 184	194 911	251,405	53,927	2 100,537
1846–47	705,979	323,462	127,852	242,789	350,200	28,369	1,778,651

The growth of Texas comprises that portion shipped by sea only. A considerable portion arrives at New Orleans by way of Red river, and is included in the receipts at that port. The quantity of Texas cotton shipped was, last year, 27,008 bales, and this year only 8,317 bales. The great falling this year has occurred in the heavy bales, and the increase in the light ones. The New Orleans, Texas, and Florida bales average 450 lbs.; those of Mobile, 480 lbs.; while the Atlantic bales have not been more than 380 lbs. each. The distribution of the crop has been as follows:

EXPORTS, CONSUMPTION AND STOCK.

	1839.	1840.	1841.	1842.	1843.
Great Britain....bales	798,418	1,246,791	858,762	935 631	1.469 711
France	242 243	447,465	348,776	398,129	346,139
North of Europe	21.517	103,232	56,279	79,956	117 794
Other ports	12,511	78,515	49,480	51.531	76,493
Total	1,074,689	1 876 003	1 313,277	1,465,249	2 010,137
U. S. consumption	276,018	295,193	297 288	267,850	325 129
Stock U. S., Sept. 1	52,244	58,442	72,479	31,807	94 486
	1844.	1845.	1846.	1847.	
Great Britain	1,202,498	1,439,306	1,102,369	830,909	
France	282,685	359,357	359 703	241 486	
North of Europe	69 053	134,501	86 692	75,689	
Other ports	75,254	150,592	118,028	93 138	
Total	1,629,490	2,083,756	1,666,792	1,241,222	
United States consumption	316,744	389 006	422,597	427,967	
Stock United States, Sept. 1	159 772	94,126	105 626	214,837	

Great Britain has taken this year less than her usual quantity, and

the competition of the continent has, in spite of adverse circumstances, gone far to sustain the market. The prices have been, semi-monthly, in the New York market as follows:

PRICES OF COTTON IN NEW YORK MARKET.

	1844–5.		1845–6.		1846–7.		
	Fair Up.	Fair Or.	Fair Up.	Fair Or.	Fair Uplands.	Fair Orleans.	Freight.
Sept. 14	6⅛@7¼	7⅛@7⅛	8¼@8¼	8¼@ 9	9¼@ 9½	9⅝@10	3-16@1-4
" 30	6⅛@7¼	7⅛@7⅛	8¼@8¼	9 @ 9¼	9¼@10	10 @10½	3-16@3-16
Oct. 15	6⅛@7	7¼@7⅛	8¼@8¼	9 @ 9½	10 @10¼	10½@—	3-16@3-16
" 31	6⅛@7⅛	7¼@7⅛	8¼@8½	8⅝@ 9	10¼@10½	10½@10⅝	1-4 @5-16
Nov. 15	6⅛@6¼	6⅛@7⅛	7¼@7⅛	8¼@ 8½	10 @10¼	10¼@10⅝	3-8 @1-2
" 30	6¼@6½	6⅛@6½	7¼@7⅛	8¼@ 8⅝	9¼@10	10 @10¼	7-16@5-8
Dec. 14	5⅝@6	6⅜@6½	8 @8¼	8¼@ 9	10½@10⅝	10¾@11	3-8 @7-16
" 31	5⅜@5⅝	6¼@6⅜	7⅜@8	8¼@ 8⅝	11 @11¼	11½@—	3-8 @3-8
Jan. 15	5⅝@6	6⅜@6⅜	7¼@7⅜	8¼@ 8½	11½@12	12 @12⅜	3-8 @7-16
" 31	6⅜@6½	6⅜@7	7¼@7⅜	8¼@ 8½	13¼@13¾	13¾@14	3-8 @3-8
Feb. 15	6⅜@6⅝	6⅜@7	7½@7⅜	8¼@ 8½	12¼@12½	12½@13	3-8 @3-8
" 28	6¼@6⅝	6⅜@7	8 @8¼	8⅜@ 9	10½@11	12 @12½	3-4 @1d.
Mar. 15	6¼@6½	6⅝@6⅞	8¼@8½	9 @ 9½	11 @11⅜	12½@13	5-8 @3-4
" 31	6⅜@6⅝	7¼@7⅛	8¼@8¼	9¼@ 9½	12 @12½	13 @13½	3-8 @1-2
April 15	6½@6⅝	7 @7¼	8 @8¼	9 @ 9½	12 @12¼	13 @13½	3-8 @1-2
" 30	6½@6⅝	7 @7½	8¼@8⅝	9¼@ 9½	13 @13½	13¾@14½	3-16@1-4
May 15	6½@6¾	7 @7¼	8 @8¼	8¾@ 9	13 @13¼	13¾@14	3-16@1-4
" 31	6⅝@7	7⅛@7⅜	8 @8¼	8¾@ 9	12¼@12⅝	13¼@13½	3-16@1-4
June 14	7⅛@7⅛	8 @8¼	8 @8¼	8¾@ 9	12 @12¼	13⅜@13	3-16@1-4
" 30	7⅛@7⅜	8¼@8⅝	8 @8¼	8¾@ 9	12¼@12½	13 @13½	1-4 @5-16
July 15	7⅜@8	8¼@8¼	8 @8¼	8¾@ 9	12¼@12⅝	13⅜@13	5-16@3-8
" 31	8¼@8½	8⅜@9	8¼@8¾	9 @ 9½	12¼@12⅝	13 @13½	7-16@9-16
Aug. 15	8 @8⅜	8¼@8⅜	8⅜@9	9¼@ 9½	13 @13½	13½@13⅝	1-4 @3-8
" 30	7⅜@8	8¼@8½	8¼@9¼	9¼@10	12¼@13	13 @13½	1-8 @3-16

Art. VII.—DIRECT TRADE OF SOUTHERN STATES WITH EUROPE.

NO. III.

In our last we reviewed a portion of the ground occupied by the South-western States upon the important subject of European commerce, and examined the proceedings of the Convention held at Augusta, Ga. In subsequent numbers the general subject will be continued. We cannot at this time do a more acceptable service than publish the able report made by the Committee of twenty-one, in 1839, to the Convention held in the city of Charleston. As this report had but a limited circulation and is entirely out of print, though an invaluable and able paper, we give it entire. Chancelor Harper was chosen chairman of the committee, though, if we mistake not, the Hon. Robert Y. Hayne drew up the document.

And first, as of some note and worthy of preservation, we give the names of the delegates in attendance and the States represented.

FROM SOUTH-CAROLINA.

Charleston.—Robt. Y. Hayne, James Hamilton, Hugh S. Legare, C. G. Memminger, Ker Boyce, Abraham Tobias, Samuel Burger, Thaddeus Street, James Robertson, Henry L. Pinkney, John Robinson, Neil McNeill, C. Burckmyer, L. G. Capers, Thomas Bennett, S. P. Ripley, Charles Edmondston, Abraham Blanding, Andrew McDowall, H. W. Conner, John C. Ker, Daniel Ravenel, Alexander Black, David Alexander, Arthur P. Hayne, L. Trapmann, James Adger, J.

N. Cardozo, John A. Stuart, Richard Yeadon, jr., Jas. S. Bowie, Hugh R. Banks, Robert Collins, Benj. F. Hunt, Geo. A. Kelsey, M. C. Mordecai, Robert Martin, A. G. Magrath, C. M. Furman, Rene Godard, M. I. Keith, Henry Gourdin, Henry A. Middleton, J. F. Entz, Thos. O. Elliott, Alfred Huger, Robert W. Fort, Geo. A. Trenholm, Alex. McDonald.

Kershaw.—Wm. J. Grant, Christopher Matheson, Jno. Boykin, James K. Douglas, Alexander Young.

Richland.—Wm. C. Preston, David J. McCord, B. F. Taylor, James L. Clark, David Ewart, Wm. G. McNeill, John S. Preston, M. H. Deleon, Wade Hampton, F. H. Elmore, J. S. Cohen, B. L. McLauchlin, A. Wallace, John Frost, R. H. Goodwyn, J. D. Mordecai, Langdon Cheves, jr., Jno. McLean, James Fenton, John Caldwell, R. W. Gibbes, Theodore Stark, Thomas Davis, James Douglass, Patrick Noble.

St. Johns, Berkley.—Sam'l Dubose, Isaac Porcher, jr., Stephen G. Deveaux, John H. Dawson, James Ferguson, S. W. Barker, R. W. Roper.

St. Stephen's.—William Dubose.

Colleton.—John S. Brisbane, Rob't M. Allan, Malachi Ford, Thomas Raysor, R. B. Rhett, J. Boyle, D. K. Whitaker, D. S. Henderson, J. W. Burbridge.

Georgetown.—E. T. Heriot, J. Harleston Read, jr., James G. Henning.

Edgefield.—N. L. Griffin, L. T. Wigfall, H. Burt, Thos. Smith, J. R. Wever, Richard Parks, Whitfield Brooks, Henry Shultz, T. H. Nixon, Gilbert Tennent, Edmund Penn, J. P. Carroll, M. L. Bonham, M. M. Gray, H. L. Jeffers, W. W. Starke, Jas. Jones.

Barnwell.—W. J. Duncan, E. Bellinger, jr., J. H. Hammond, J. G. Brown, B. H. Brown, J. G. W. Duncan, A. P. Aldrich, T. S. Ransome, James Patterson, S. Stansell, J. J. Ryan, Thomas Addison, M. D. Maher, S. D. Parker, S. W. Trotti, E. Lartigue, C. F. Tobin, W. S. Reynolds.

Beaufort.—Alex. J. Lawton, John Frampton, Sidney Smith, Alfred Raoul, Robert Chisolm, B. McBride.

Orangeburgh.—D. F. Jamison, David Shuler, W. L. Lewis, Samuel B. Dwight, Wm. P. Russell, Jno. M. Felder, Jacob Stroman.

Abbeville.—Joel Smith, A. B. Arnold, James S. Wilson.

Pendleton.—Francis K. Huger.

Greenville.—B. Dunham.

Laurens.—Beaufort T. Watts, R. H. Spear, J. Watts, H. Saxon.

Union.—David Johnson, J. M. Gadberry, Joseph H. Dogan, R. J. Gage, F. W. Spears, J. Wright.

Chester.—John Dunovant, Jesse Cornwall, John McKee, Jordan Bennett, John T. M. McAfee.

Fairfield.—B. F. Davis, William Harper, J. H. Means, R. Cathcart, William S. Lyles, Thos. McCullough, S. G. Barkley.

Darlington.—E. W. Charles.

Newberry.—James P. Caldwell.

Sumter.—F. Sumter, James Haynsworth, J. N. Frierson.

Lexington.—H. J. Caughman, John A. Addison.

FROM NORTH-CAROLINA.

Asheville.—Mitchell King, William Patton, Dr. S. H. Dickson.

Warren Co.—C. F. Maddux, E. J. Lynah.

Fayetteville.—E. J. Hale, J. W. Sandford, E. W. Wilkings, J. B. Eccles

FROM GEORGIA.

Athens.—William Dearing, Asbury Hull, Burwell Pope, John J. Huggins.

Augusta.—John Phinizy, John Bones, John Kerr, John G. Winter, Louis A. Dugas, James Rhind, Samuel M. Thompson, James W. Davies, Thomas G. Casey, Wm. M. d'Antignac, James T. Gray, Pleasant Stovall, Isaac Moise, John Milledge, Andrew J. Miller, A. B. Longstreet.

Darien.—Benjamin Green.

Milledgeville.—R. K. Hines, Isaac Newell.

Macon.—E. Hamilton, J. Cowles, J. B. Rowland, Charles Collins, E. Alexander, D. C. Campbell, Thomas Hardiman.

Washington County.—Quintilian Skrine.

Crawfordville.—A. H. Stephens, T. Chafin, John M. Anthony.

Madison.—John Robson, William C. Saffold.

FROM ALABAMA.

Montgomery.—Charles T. Pollard, Elbert A. Holt, Jesse P. Taylor, Abner McGehee.

Pickens.—Amos Davis.

FROM TENNESSEE.

Knoxville.—William S. Kennedy, John H. Crozier, Thomas C. Lyon.

Athens.—Spencer Jarnaghin.

Greenville.—Alexander Williams.

Memphis.—T. A. Field.

FROM FLORIDA.

James Gadsden, Wm. J. Mills, Hardy H. Philips.

FROM MISSISSIPPI.

Hon. Hanson Alsbury.

Near two years have elapsed since the first commercial convention assembled in Augusta, for the purpose of promoting a "A DIRECT EXPORT AND IMPORT TRADE WITH FOREIGN COUNTRIES." It was foreseen by the projectors of this great enterprise, that it would be a work of time, and that its final accomplishment could only be effected by the exertion of extraordinary zeal, energy, and perseverance. They were well aware that essential changes in the habits and pursuits of a people—and especially in the course of their trade—could be brought about only by slow degrees. They knew that the end proposed, no less than the means to be adopted for securing it, would come into conflict with too many deeply-rooted prejudices and conflicting interests, to permit them to escape censure and avoid misrepresentation. In the very beginning, they pointed out these as among the difficulties to be encountered and overcome, before they could expect to reap the full reward of their patriotic exertions. Nevertheless, we have gone steadily forward in the consciousness of rectitude, and under a deep and abiding conviction that the "commercial independence of the South" is too closely connected with the welfare, prosperity, and honor of this quarter of the Union, ever to be abandoned, while there remained the smallest hope of ultimate success. The evil complained of, is, that the Southern and Southwestern States, while producing near three-fourths of the domestic exports of the Union, import scarcely one-tenth of the merchandise received in exchange for them. The foreign commerce, which derives its existence from the productions of our industry, and which is the unfailing source of so much wealth to others, is carried on by the citizens of other States, causing their cities to flourish, while ours have been falling into decay. The profits of the *agency* by which this trade has been carried on *for us*, has been estimated at ten millions of dollars annually. The annual loss to Georgia and South Carolina cannot be less than three millions, while Mississippi (whose exports even now amount to $16,000,000), must lose a million and a half annually. No one acquainted with the present course of trade and the usual measure of mercantile profits, would, we presume, estimate the gains of the northern merchants from the almost exclusive possession of the carrying trade for the South, at less than from 10 to 15 per cent.,* which would exceed the amounts above esti-

* In an able report made by Mr. PORTER to the Legislature of Alabama, the following striking views are presented of this branch of the subject:

"Of the two hundred and eighty thousand bales of cotton which find their way to

mated. The natural, indeed the inevitable effect of this state of things upon the plantation States, has been to subject their industry to an indirect tax, which has consumed so large a portion of their annual profits as to deprive them, in a great measure, of the means of accumulating the *capital* equally essential to the success of commercial pursuits, as to the general improvement of our country. It has

market from this State, probably one hundred thousand reach New Orleans by the Tennessee and Mississippi rivers, and the balance passes through Mobile. That portion of the amount which reaches Mobile, and is not shipped to Liverpool and Havre through New York, is shipped directly to the foreign market in vessels owned in the latter city, after being purchased by capital owned there likewise; so that we may estimate the entire amount of our exports of cotton (worth eighteen millions of dollars) has to reach the European market through agents who are not citizens of the State, and upon whom we need not be necessarily dependent. This probably costs us one million eight hundred thousand dollars. But it will be asked, can every producer sell for himself? We say, no; but if we employ agents, let them be our own citizens, who will return the profits they make back into the same community from which they are derived, and the burden will cease to be intolerable. Again—the same channels return us our imports. These consist of dry goods, cutlery, and groceries, which we indirectly purchase to a large amount from Europe and the West Indies, through New York, by the same agents. If our imports equal in value our exports, which is the stated rule, and those who thus purchase for us, charge us only ten per cent. which is a very moderate calculation (as we believe imports to the Southern market may be safely arranged at twenty per cent.) we pay upon our imports one million eight hundred thousand dollars. Thus making upon exports and imports three million six hundred thousand dollars, which we pay for the privilege of taking the Northern markets in our route to those of foreign countries. This is a calculation in respect to our own first markets. Add to the amount the expenses and charges upon goods before they go into the hands of the consumers, and the sum total will be very greatly increased.

If this amount must be paid, why should it not be paid to our own citizens? If we must employ agents, why should we not select those who will return the profits they derived from us, back to us again? Why should not the Legislature of the State put forth its most liberal power to attain the people this most desirable end? Why should not the people themselves, while the resources of this noble and prosperous State are full of youth and energy, seize upon an enterprise which thus promises such beneficial results?—results of no chimerical, vague or uncertain character, but taught us by the lesson of facts, ascertained by the best proof—the proof of experience itself.

If we take the article of cotton alone, and enter into a calculation of the loss occasioned to the planting interests of the South and West by an indirect trade, we will be astonished at the result. The estimated crop of cotton for the year ending 30th September, 1838, is 1,891,497 bales. This cotton is transported by sea either to the Northern ports, or directly to Europe. Of this number, 1,165,155 bales go to England; 321,480 to France; 63,009 to the North of Europe; and 25,895 to other foreign ports—making a total of 1,574,629 sent abroad. Deduct this number of bales from the entire crop, and we find that 226,868 bales are used at home, and returned to us in domestic manufactures. It is but reasonable to estimate the freight paid upon the number of bales shipped abroad at one and a half cents per pound. If this be calculated upon 1,574,629 bales, supposing each bale to contain 340 pounds, which gives 535,373,860 pounds, it is shown that the producing States pay for freight alone, $8,030,607 90. Other charges, such as commissions, shipping, insurance, may be said to amount to at least five per cent. Now the amount of the crop shipped valued at thirty dollars per bale, is $47,238,870.

Five per cent. upon that amount is - - - - - - - -	$2,361,943 50
To which add the freight, which is - - - - - - - -	8,030,607 90
And you have a total of - - - - - - - - - -	$10,392,554 40

This immense amount deducted from a crop of the value of $47,238,870, is distributed among those who act as the transporting and selling agents of the producer, all of whom live north of the Potomac river. The South thus stands in the attitude of feeding from her own bosom a vast population of merchants, ship owners, capitalists and others, who without the claims of her progeny, drink up the life-blood of her trade.

It cannot be here asserted that a deduction should be allowed for that portion of the Southern crop which is shipped directly from the southern ports to foreign countries. The tonnage register will show that nine-tenths of the shipping employed belong to Northern capitalists.

Now let us bring this calculation home to Alabama. Her estimated crop of cotton

been supposed that with the vast resources of the cotton-growing States, the mere abstraction of a few millions annually, by an unfavorable course of trade, could not very materially diminish their wealth, or impair their prosperity. But let it be recollected, that the sum drawn annually from these States by the *combined operation* of all the causes which have concurred in diverting to the North the profits of southern labor and capital, are by no means inconsiderable in amount. In addition to the ten millions of dollars yearly abstracted by the unfavorable course of our foreign trade, the ACTION OF THE FEDERAL GOVERNMENT in the collection and disbursement of the public revenues, has operated as a burden to an equal or even greater amount. The system of raising, by duties on foreign goods, nearly the whole amount necessary to meet the wants of the government, including the discharge of an immense public debt, was, of itself, calculated to depress the industry of the cotton-growing States, which was almost exclusively employed in raising the products which were exchanged for the very articles thus enormously taxed. But when these duties were extended to an amount greatly exceeding the wants of the government, ranging from 25 to upward of 100, and amounting on an average to 40 per cent., imposed for the avowed purpose of affording protection and encouragement to those, the productions of whose industry (free from all taxation) came into direct competition with the foreign goods received in exchange for our cotton, rice, and tobacco, *when* the vast amounts thus extracted WERE ACCUMULATED AT THE NORTH, and there expended on the army and navy, the fortifications, public buildings, pensions, and the other various objects of national expenditure—the balance being distributed in INTERNAL IMPROVEMENTS—of which we receive but a small share, can it be a matter of wonder or surprise, that even with the richest staples in the world, the South should exhibit the extraordinary spectacle of a country making hardly any progress—while the more fa-

for the year ending 30th September, 1838, is 309,807 bales. This calculated at four hundred pounds to the bale, gives 123,932,800 pounds. One and a half cents freight is - - - - - - - - - - - - - - $1,858,842
Commissions, shipping, insurance at five per cent. on amount of crop, is, viz. $12,392,280, at $40 per bale, is equal to - - - - - 619,614
Add one and a half cents per pound for baggage, factor's commissions, transportation to Mobile, which is - - - - - - - - - 1,858,842

Total, - - - - - - - - - - - - - - $1,337,298

Deduct this from $12,392,289, the value of our crop at home, and we have left us $8,054,982.

When in addition, it is collected that this amount is again indirectly expended abroad in purchasing our articles of consumption, we will perceive that the most ruinous consequences follow. The destination and disposition of our products for the last twenty years, have not been made subjects of consideration by our citizens, nor their importance estimated. We content ourselves with buying and selling again, without inquiring farther than to know that our crops increase, and that we dispose of them readily. We do not perceive the great drain which is made from us by the capital of others. Foreign capital purchases our produce, but it is taken up instantly by foreign imports. Foreign merchants act as our agents in the two transactions, but spend not a dollar of the money we pay among us again. The immense value of our labor is thus taken abroad, and it is well known that we live humbly, make no expensive improvements, spend little in the luxuries of life, and have few means at the close of the year. Where, then, goes the value of our labor, but to those who, taking advantage of our folly, ship for us, buy for us, sell to us, and after turning our own capital to their profitable account, return laden with our money, to enjoy their easily earned opulence at home.

vored, though comparatively barren, regions of the North were seen constantly advancing in wealth and prosperity? This UNEQUAL ACTION OF THE FEDERAL GOVERNMENT—as it was, in the first instance, the most prominent cause of the subversion of southern commerce—has constantly operated in *preventing its recovery*, by stimulating the commercial industry of the North, and building up northern cities at the expense of those of the South and South-west.* To show the magnitude of this evil, it is only necessary to advert to the fact, that the gross amount received from customs has been estimated at the enormous sum of nine hundred millions of dollars, nearly three-fourths of which were levied on goods received in exchange for the productions of the South and South-west, and nine-tenths of it expended north of the Potomac. Now, if one of the effects of this most unjust and unequal system has been to stimulate the industry of the North, and thus to throw the importing business almost entirely into the hands of northern merchants, then it is manifest that we have been deprived of the profits to be derived from the importation and sale of an amount of foreign goods, which, estimated by the value of our productions, could not have fallen far short of a thousand millions of dollars—the entire value of importation being estimated at near three times that amount—a sum so vast that the usual profits on the importations would have been abundantly sufficient to have changed the entire face of our country, and given us a capital fully adequate to all the purposes of the most prosperous foreign commerce, and the most extensive system of internal improvements.

But there is another view of this subject, entitled, we think, to more weight than it has yet received. The prosperity of States depends in a far greater degree upon their ACCUMULATED CAPITAL than is generally supposed. A people whose industry is exhausted in the bare supply of their wants, can make but small advances in science or the arts. All great public improvements must be the result of *capital*, accumulated by years of successful industry. The man who lives by his labor, has neither leisure nor inclination, and if he possess both, has not the means of improving his own condition, much less of developing the resources of his country. And whatever may be the productions of any country, if the consumption be equal to that production, it is clear that capital cannot be accumulated to any great extent. National wealth chiefly depends on *the excess* of annual production over the annual consumption. This constitutes, at all times, and under all circumstances, A COMPARATIVELY SMALL PORTION OF THE WHOLE ANNUAL PRODUCTION, much the greater part of which must necessarily be consumed in the support of the producers. Now, according to this law of society, which is founded in the very nature and constitution of man, it is manifest that the yearly abstraction, whether it be by the action of the government or the operation of an unfavorable course of trade, of even a comparatively small portion of the annual gains of any people, may so far affect their prosperity as to leave them in the condition of a community making no advances whatever

* The excitement of the Southern States some years ago, and particularly in South Carolina is a subject of history, whether just or unjust is left to the future. Our neutrality is in no wise committed by the publication of this section of the Report. Let it go as a whole.—EDITOR.

in wealth and prosperity. If the millions, therefore, which have been abstracted by the government from the southern and south-western States, and expended elsewhere, had been left here to accumulate, and to be applied to all the uses of society; if our citizens even now derived all the profits which our great staples still furnish to the merchants and manufacturers of the North, we would not hear continued complaints of that want of capital, which we are told opposes so great an obstacle to the success of our schemes. The addition of even one million and a half a year (to rate it no higher) to the commercial capital of Mississippi, Georgia, and South Carolina, for the last ten or fifteen years, would at this time have placed these States in a condition of the highest prosperity. One of the most unfortunate consequences of the subversion of southern commerce has been the depriving us of that DIVERSITY IN THE PURSUITS OF THE PEOPLE on which, we are persuaded, the prosperity of every community, in a great measure, depends. The citizens of the southern and south-western States, driven from the animating pursuits of commerce, have, it is undeniable, devoted themselves *too exclusively* to agriculture. With us, the usual routine of business has been, to produce as much cotton, rice, and tobacco, as our land and labor would afford. Whatever profits could be derived from the transportation, sale, and manufacture of these articles, or from the business of conducting the exchanges, we were content to leave in the hands of others. If, at the end of the year, the planter found that he had supported his family, and was not brought into debt, he was well content. The fortunate few whose incomes exceeded their expenditures, were naturally led to the extension of their plantations rather than to the investment of their surplus in commerce or manufactures. Except in the immediate neighborhood of the cities (whose bank and other stocks have commanded the attention of a few of our wealthy planters), the regular course has been to invest the entire profits of agriculture in lands and negroes. The poorer class of planters have thus been induced to sell out their possessions to their more wealthy neighbors, and have gone with the proceeds to other States, while the acquisition of more land, and the production of more cotton have been regarded as the only objects worthy of the attention of those who remained at home. The most disastrous consequences have resulted from this unfortunate habit among our agriculturists. In the first place, the increase of the quantity of cotton thus produced, has not been attended by a corresponding increase in the profits of the planter. According to a law in political economy, well understood, and which admits of few exceptions, a mere increase in the quantity of any article of general consumption, seldom increases its money value in a corresponding degree, while the lessening of the production not unfrequently enhances that value. Hence the practice of the southern planters of devoting their *whole attention* to the increase of their cotton crops, is not attended by a corresponding increase in their value. It is a notorious fact, that the shortest crops of this article are not unfrequently the most profitable, and it can hardly be doubted that if the whole surplus of our agriculture for several years past had been applied to other pursuits, instead of being invested in lands and applied to the production of more cotton, the cotton cro-

would have been worth, at this time, nearly as much as it is at present, while this surplus invested in commercial or other pursuits, or applied to public improvements, would have added to the wealth and improved the character of our people, and, by diversifying their pursuits, have stimulated their industry and strengthened our peculiar institutions.*

From this brief review of the subject, it will be seen that the present depressed state of southern commerce has been brought about by causes which, however powerful, have, in a great measure, CEASED TO EXIST, and that the opportunity is now presented, by improving our present advantages, of removing them altogether, and regaining all that we have lost. The national debt of $420,000,000 has been fully paid. The tariff, already greatly reduced, is gradually receding to the "revenue standard." In a little more than two years, by a proper vigilance on the part of our representatives in Congress, and a firm determination on our own, to *insist*, in the terms of the compromise act, on the reduction of the tariff to the "revenue standard," based on "an economical administration of the Federal Government," with the continued preservation of the blessings of peace, so indispensable to our welfare, we shall soon be relieved from a system which has sapped the very foundations of our prosperity, and reduced us almost to a state of "colonial vassalage." For the rest, we must depend upon ourselves. That the difficulties under which we have labored have not arisen from anything inherent in our situation or character is abundantly proved by our past history. The statistics of the United States enable us to present to the world the following statements, exhibiting at one view the true history of the rise, progress, and decay of southern commerce, and pointing out with unerring certainty the causes of that decay. We extract them from one of the documents already published by the convention, which cannot be too frequently read, or too carefully studied.

The time was, when the people of the South were the largest importers in the country.

In 1769, the value of the imports of the several colonies was as follows:

Of Virginia	£851,140 sterling
New-England States	561,000 "
New York	189,000 "
Pennsylvania	400,000 "
South Carolina	555,000 "

The exports were in about the same proportion; Virginia exporting nearly four times as much as New York; and South Carolina nearly twice as much as New York and Pennsylvania together; and five times as much as all the New England States united.

* From what has been here said, we would not be understood as indulging in any fears that cotton is an article, the production of which is at all likely to be *overdone*. It is the cheapest raw material out of which cloth can be made, and is destined, we have no doubt, to supersede to a great extent all manufactures of wool, flax, hemp, and silk; and when shirting and sheeting, sails, carpeting, hats, blankets, and even broadcloths, shall be made, as they shortly will be, entirely of *cotton*, the world will consume, not only all the cotton now produced, but four times the quantity. Still the quantity produced may be diminished without lessening *our profits*, and the capital thus diverted from agriculture to commerce and manufactures will be a great gain to the country. The Southern States must always be essentially *agricultural*. It is well that it should be so: slave labor is best adapted to agricultural pursuits. Still we should be great gainers by diversifying in some degree the pursuits of our people.

The same relative proportion of imports is preserved until the adoption of the Federal Constitution, when we find them to be in the year 1791, as follows:

Of New York	$3,222,000
Virginia	2,486,000
South Carolina	1,520,000

There are no data to show the imports into the several States from the year 1791 to 1820, but the general fact may be assumed, that the import trade of New York and other Northern States, has been constantly progressing, while that of Virginia and South Carolina has as regularly diminished. From 1821, to the present time, we have sufficient data, and they exhibit the following as the state of the import trade:

Years.	New York.	Virginia.	South Carolina.
1821	$23,000,000	$1,078,000	$3,000,000
1822	35,000,000	864,000	2,000,000
1823	29,000,000	681,000	2,000,000
1824	36,000,000	639,000	2,400,000
1825	49,000,000	553,000	2,150,000
1827	39,000,000	431,000	1,800,000
1829	43,000,000	375,000	1,240,000
1832	57,000,000	550,000	1,213,000

Thus the import trade of New York has gradually increased from £189,000 sterling, about $840,000, in the year 1769, and from about three millions of dollars in 1791, to the enormous sum, in 1832, of fifty-seven millions of dollars! while Virginia has fallen off in her import trade, from two and a half millions of dollars, in 1791, to $375,000 in 1829, and $550,000 in 1832, not a great deal more than the freight of half a dozen ships!

From these calculations a few curious facts appear. The imports of New York were, in 1832, seventy times as great as they were in 1769, and nearly twenty times more than they were in 1791. Virginia on the other hand, imported in 1829 about one-eleventh of what she did in 1769, and about one-seventh of what she did in 1791. In a period too of eight years, the aggregate imports of New York amounted to three hundred and eleven millions of dollars; those of South Carolina to about sixteen millions, and those of Virginia to about five millions! New York imported, therefore, in 1832, eleven times as much as Virginia did in eight years preceding, and nearly four times as much as Virginia did in eight years preceding, and nearly four times as much in the single year of 1832, as South Carolina imported in a period of eight years. Again, New York imported in one year, (1832) nearly fifty times as much as South Carolina in the same year, and about 110 times as much as Virginia.

Having shown the decline of Southern trade, we proceed to inquire into the causes of it. In the course of our research the reader will discover the prime cause of our present embarrassments.

The Committee of Ways and Means, in their report of the 5th March last, say: "Our collectors have had under their control a gross revenue of $946,000,000, and our land receivers $107,000,000, making $1,053,000,000. They not only had control of this vast amount, but they were permitted to pay without warrant from the treasury, *and before the money passed out of their hands*, all the expenses of our custom-houses and land offices and debentures *which alone amounted to four or five millions annually, and sometimes more.*"

Though we find some difficulty in reconciling this statement with the actual receipts and disbursements of the Government as reported annually to Congress, and with the expenses of collection as discoverable from the sources of information which lie within our reach, without supposing greater losses in the transit of the public funds to the treasury than are stated to have occurred, it is probable that our difficulty arises from our limited means of research, and that the Committee are substantially, if not literally correct.

The nine hundred and forty-six millions of revenue raised from the customs were levied from foreign merchandise, received in exchange for domestic productions; for though the term *customs*, in financial language, embraces duties on tonnage, clearances, light-money, &c., &c., these are comparatively so insignificant that they will not materially affect the estimate. Those who think differently, may allow for them the odd forty-six millions. Of the domestic productions given in exchange for foreign merchandise, nearly three-fourths were of southern growth -we will say two-thirds, which we know, in the whole estimate, to

be under the mark. Without disturbing the vexed question, "who pays the duties," we may state then, what all will admit, that the Government has been indebted to southern industry for six hundred and thirty millions of money. If the expenses of collecting one thousand and fifty-three millions of revenue were "from four to five millions annually, and sometimes more," it may safely be assumed, that the expenses of collecting the six hundred and thirty millions amounted to one million annually. Had the southern people then shipped their own produce to foreign markets, and brought the return cargoes to their own ports, they would have had eight and forty millions distributed among them since 1789, simply in the pay of their revenue officers. This would have gone into the pockets of individuals, to be sure; and so goes all that constitutes the wealth of a nation. *Here* would it have been received, and *here* expended. Insignificant as it may seem while we are contemplating thousands of millions, when we reflect upon the influence which the comparatively trivial sum received by the States from the surplus revenue has had upon the southern States, we cannot doubt that its effects would have been most benignly felt. This sum divided among the cities of Norfolk, Wilmington, Charleston, Savannah, Mobile and New Orleans, would have quieted many a disturbed bosom in the trying reign of the protective system. Savannah's portion of it would have defrayed the whole expenses of the government of Georgia for more than thirty years; nor, it is believed, would the portions of the other cities have done less for their States. Whatever the sum may have been worth, we must be considered as having thrown it away ourselves. Let us at least remember, that if the tariff should ever be revived (and hints to that effect have recently fallen from high authority on the floor of Congress), a direct trade will in some measure mitigate its rigor; and thus far tend to the preservation of the Union.

If we suppose the value of the goods upon which the six hundred and thirty millions of d ties were levied, to have been but four times the value of the duties, it amounted to $2,500,000,000. How were these goods brought to this country and distributed? The Northern merchant has come hither and bought from the Southern planter produce of equal value, abating from the price, all the expenses, direct and incidental, of transportation—he has insured them in Northern offices, and shipped them abroad in his own vessels—exchanged them at a small profit for foreign merchandise—brought it home—paid one-fourth its value to the Government—added that amount and all the expenses of importation, and fifteen to twenty per cent. for his profits to the price, and exposed it for sale. The Southern merchant has now gone to him; lingered the summer through with him at a heavy expense—bought a portion of these goods—re-shipped them in Northern vessels to Southern ports—added twenty-five per cent. more to the price, to cover his expenses and profits—and sold them to the Southern planter. All the disbursements made in this process, save such as are made abroad, are made among Northern men; all the profits, save the Southern merchant's, are made by Northern men; and the Southern planter, who supplies nearly all the foreign goods of the country, gets his portion of them burdened with every expense that the Government, merchant, insurer, seaman, wharfinger, drayman, boatman, and wagoner can pile upon them. His burdens, of course, are needlessly increased by the amount of the expenses incurred in landing the goods at Northern ports, and bringing them thence to Southern markets. Every item in the endless catalogue of charges, except the Government dues, may be considered a voluntary tribute from the citizens of the South to their brethren of the North: for they would all have gone to our own people, had we done our own exporting and importing. Will the reader compute the amount of them on twenty-five hundred millions worth of goods, and make a fair allowance for the portion of them consumed at the South?

In 1835, the long-endured national debt was extinguished, after having absorbed from the treasury about four hundred and twenty-two millions of dollars. The larger portion of this sum was paid to the citizens of the United States; of whom, those residing north of the Potomac were to those residing South of it, in the ratio of 165 to 11; and those in Massachusetts, New-York and Pennsylvania, to those in all the other States, as 150 to 176. Whence, but from their commerce, did the Northern States acquire the means of loaning so largely to the Government? Whence, but from the same source, did three States acquire the power to loan thirteen times as much as all the Southern States put together? And with the power to lend, was it no advantage to them, to have been enabled to lend, upon the best security in the world?

So much for our own voluntary self-impoverishment. A word or two upon

those contributions which we have made to the fortunes of our Northern brethren, and which may be denominated, compulsory.

The actual disbursements of the General Government have been about one thousand millions of dollars, exclusive of the surplus revenue. The greater part of this immense sum was disbursed among the several States. A rateable distribution of this fund between the Northern and North-western, and Southern and South-western States as they now stand, would have been *nearly* as follows:

According to whole population, as	7 to 5
" " white " as	7 to 3
" representation, as	5 to 3
" area, as	4 to 5

How have they actually been? Up to 1830, there had been expended in the several States and Territories two hundred and eighteen millions of public money, in fortifications, light-houses, public debt, pensions, and internal improvements; of which sum, one hundred and ninety-five millions were disbursed in the Northern and North-western States; and twenty-three millions in the Southern and South-western. The national debt constitutes by far the largest item in this account, and it was but equitable that this should be paid to the lenders in the proportions of their loans. But in the matter of internal improvements, the Southern division should have received a ninth more than the Northern. The disbursements under this head were—north of the Potomac, in round numbers, four millions seven hundred thousand; south of the Potomac, two hundred and sixty-seven thousand; or nearly 18 to 1.* Pensions 17 to 2; light-houses (consider our coast) 2 to 1; fortifications, equal but never equal afterward, and never to be equal again. The expenditures on the Cumberland road alone, were about nine times the amount expended for internal improvements in all the Southern and South-western States together; and without that, the proportion North and South was as 8 to 1.

But this gives us a very inadequate idea of the extent of the disbursements in the several States. It touches not the first cost, and the annual expenses of the national establishments, most of which are at the North; nor the pay of the officers, principal and subordinate, in the several departments of the government, most of whom are citizens of the North; nor the ten thousand other items of expense, which go to make up the grand total of $1,000,000,000. Whoever will take the trouble to follow these expenditures through all their details for a year or two, will come to the conclusion, that of the whole sums disbursed among the States, little short of eight-tenths have gone north of the Potomac, or to citizens domiciled north of the Potomac. About seven hundred thousand dollars of the one thousand millions disbursed, were raised from the customs—that is to say, from duties on foreign importations, two-thirds of which were received in exchange for Southern productions. The Southern States, then, have virtually put into the treasury four hundred and sixty-six millions of the seven hundred, and drawn out one hundred and forty. The Northern States have put in two hundred and thirty-three millions, and drawn out five hundred and sixty—fractions rejected. The effect of these disbursements is like a shower of gold upon a people. They are far better. They clear rivers, improve harbors, and open roads and canals which give permanent facilities to commerce. They plant national establishments, gather villages around them, and found other public works, through which there is a constant stream of treasure flowing from the Government to the people in their vicinity.

To this we will only add the pregnant example of the city of Charleston. For several years prior to, and including the year 1807, the imports in the city of Charleston, estimating their amount by *the duties* received at the Custom-house—the average rate of duties being then about 12½ per cent.—amounted, on an average, to about *nine millions* of dollars annually. From that period, under the

* While the above was in the press, the appropriations of the last Congress for Internal Improvements appeared. They are as follows:

North and North-western States,	1,189,315
South and South-western States,	284,000
New York alone,	358,443

operation of the "restrictive system," the importations (with the exception of three years, from 1815 to 1818, immediately after the peace) *gradually declined*, until 1830. In that year the imports had fallen to *one million*. But from that time, and especially since the "American System" has received a fatal blow, and the government has commenced retracing its steps back to the "Free Trade System," our imports have been *steadily increasing*, so that they now amount to about three millions of dollars, and if we shall go on improving, will soon reach their former amount.

No one can shut his eyes to the inference to be drawn from these facts. It is as clear as the sun at noon-day, that if the Southern States, prior to the creation of the Federal Government and the adoption of the restrictive system, were actually able to carry on a profitable direct trade with all the world, of which they have been deprived by the causes to which we have already adverted, that these causes being removed, there can be no insuperable obstacle, to the resumption of that trade. Difficulties we shall certainly have to contend with, growing out of our present want of capital, and the established habits and pursuits of our people. But when it is considered that we are proceeding upon such sure grounds—that the end at which we aim, is of such transcendent importance to us and to our children—how can we allow ourselves to despair of success? It surely can require no argument to establish the position, heretofore asserted, and which no one has yet attempted to controvert, that it is the natural course of trade to exchange *directly* the productions of different countries—and that all indirect and circuitous modes of intercourse, must in general be less advantageous to the producers than the direct trade. If then the trade of the South had not, by adventitious causes, been forced out of its natural channels, our cotton, rice and tobacco, would naturally have found their way across the Atlantic from our own sea-ports, in ships *owned by our own resident Merchants;* and it is equally certain, that the goods received in exchange for those productions would have been returned to us through the same channels. Well then may we inquire, by what extraordinary combination of circumstances, by what "mighty magic," it could have happened, that when the imports of the United States reached the enormous amount of "one hundred and ninety millions of dollars, those of all the Atlantic States, and the States on the Gulf of Mexico, should have amounted only to twenty millions," while at the same time, out of $107,000,000 of domestic exports, the latter actually exported $78,000,000—South Carolina and Georgia furnishing exports to the amount of $24,000,000, and actually importing only $3,500,000.

It is vain and idle to allege, that this extraordinary state of things has arisen entirely from the want of capital, or the want of ships—from the unhealthiness of the climate, or the want of enterprise on the part of our people. All of these causes combined are wholly insufficient to account for the extraordinary REVOLUTION which has been effected in the course of trade during the last thirty years. The truth is, that the commercial capital that we formerly possessed, and which was then found to be fully adequate to all the purposes of a direct trade, has been abstracted from us, and diverted into other

channels by the causes to which we have already adverted, and Southern ships and Southern importers and Southern commerce, have all shared the same fate.

The objection, that the health of our Southern sea-port towns opposes any serious obstacle to a direct trade, is altogether imaginary. With the single exception of the yellow or stranger's fever, which seldom makes its appearance at the South oftener than once in four or five years, and from which the cities of the North are not entirely exempt, we are actually subject to fewer fatal epidemics, than our Northern brethren. The bills of mortality of the different cities of the Union, will show, that the general health of our cities is at least as good as that of the cities of the North. Consumption alone destroys a greater number of lives in the cities of the North, in proportion to their population, than are lost in Charleston and Savannah from yellow fever and consumption combined, deducting from the latter the number of strangers who come here in the last stages of the disease for the restoration of their health. We will here state for the information of those who have been deceived by exaggerated reports on this subject, that until the past summer, Charleston had not been visited by the yellow or stranger's fever, for a period of fourteen years—that it was then confined, as it always has been, almost exclusively to strangers—the native population continuing to enjoy their usual health—that its continuance was limited to a few weeks, and those not embraced in the usual business season—and that the appearance of the disease has been attributed to extraordinary causes not likely soon to recur. Under these circumstances, the force of the objection founded on the supposed sickliness of the sea-ports of the South and South-west, may be duly estimated. If these cities, however, were really as unhealthy as they have been commonly supposed to be, and like the cities of the North, were liable to have their harbors closed up by ice, during a portion of the business season, still there would be nothing in all this, to prevent our exchanging *directly* the productions of the South for those of other countries. While our cotton, rice and tobacco, do actually find a market abroad, and are paid for in foreign goods, what possible difference could it make on the score of health, whether our returns were received directly from Europe, or coastwise from New York? The truth however is, that from the first introduction of commerce among nations up to the present time, it has seldom happened, that any place was found to be too unhealthy for the establishment of an import and export trade, exactly commensurate with its productions and its wants.*

We do not complain that our cotton wants a market, or that ships and merchants are not found to carry it abroad and bring back the returns—but what we complain of is, that the profit of these exchanges are enjoyed almost exclusively by those who *do not live among us*, to the great injury of our own people and our own country.

There are three causes, however, which have been assigned for the depression of Southern trade, which, it must be admitted, have exerted, and still continue to exert, a powerful influence over our

* The reader will find valuable tables of the health of Southern cities in the numbers of our Review for 1846 and 1847, particularly in the May number of the latter year, in an article by Dr. Nott, of Alabama.

destinies, and which must be removed, at least to some extent, before we can hope for complete success in our present enterprise.

The first is the want of a commercial *capital* adequate to the great demands of a direct export or import trade.

The second, the want of a sufficient *demand*, in our own ports, for the goods which, in the event of the establishment of such a trade, would be received at these ports.

Third, the want of lines *of packets and steamships* running at stated periods between our own ports and those of Europe.

These are the real difficulties to be overcome, and which must be surmounted, before we may calculate confidently on the entire success of our efforts.

Let us consider each of these in their order.

1st. Capital. To provide the *capital* necessary to carry on the direct trade to the extent desired, these plans suggest themselves. A portion of the capital now engaged in agriculture, should be invested in commercial pursuits. We have already shown that this may be done not only without injury, but with positive benefit to the agriculture of the South and South-west. It is not desired that our planters should leave the cultivation of their fields to engage in the business of the counting-house. All that we would propose is, that they should set apart a portion of their annual surplus, and invest it in commerce. To enable them to do this without risk to themselves, the Legislatures of several States have, at the instance of the Convention, authorized the formation of limited copartnerships, by which means the opportunity is afforded to every one, of investing such portion of his capital as he may think proper in commercial pursuits, without incurring a risk of losing in any event more than the amount so invested. It has been well observed, that if every planter in our country would invest only the tenth part of a single crop in this way, the deficiency in our commercial capital would be at once supplied. We confidently believe that the profits to be derived from such an investment, would be greater than if the same amount were applied to the usual purpose of making more cotton—indeed, we are persuaded, that the profits of agriculture would not thereby be sensibly diminished, while the profits of commerce would be greatly enlarged. We are well aware, that it is not in the course of human affairs that such a concert of action could be brought about among our planters. But we do hope and believe, that the example already set by so many of our public-spirited and patriotic citizens in this respect, will be followed by others—that limited partnerships will be extensively formed, and that by diverting a portion of their capital to commercial pursuits, our planters will contribute largely to the creation of a capital adequate to all the wants of a direct trade, and thus lay a sure foundation for our success.*

* One of the incidental advantages that would grow out of this diversion by our planters of a portion of their capital from agriculture, would be the establishment of some of their sons as merchants instead of devoting them as at present, almost exclusively, to the learned professions—in which so few succeed—or setting them with a few negroes to plant worn-out lands, the usual consequence of which is emigration or ruin. It is impossible to estimate too highly the advantage of preparing by SUITABLE EDUCATION a portion of the youth of our country of the most respectable families, for MERCANTILE PURSUITS. Such a measure, if generally adopted, would, by elevating the mercantile character, and connecting our merchants closely with all the great interests of the State give increased dignity and importance to commercial pursuits. Though we may not be able to bring back the golden age of commerce, when "Merchants were

Credit also may, to a great extent, be made to supply the place of capital for the purposes of the proposed trade. There is no one who is at all acquainted with the usual course of trade, who does not know, that the amount of money used in commercial operations, whether consisting of gold or silver, or bank bills, is very inconsiderable in proportion to the total value of the exports and imports of a country. These usually balance each other. And as our cotton exported is paid for by the goods imported, the great mass of the business is carried on through the medium of bills of exchange. The course of the business as now carried on through New York, affords an apt illustration of this position. The New York merchant, when he orders his Charleston correspondent to purchase for him a cargo of cotton, directs him to draw on him for the amount, and these drafts he meets by bills on Liverpool drawn upon his agent there, who pays them out of the proceeds of the cotton, when sold. The goods shipped for the Southern market, *via* New York, pass through the same process, and thus it often happens that the whole operation is effected without the actual use of any money, except perhaps the amount for which the bills are in the first instance sold in this country, which goes into the hands of the factor, thence passes into those of the planter—is paid to the merchant for goods, and by him returned to the bank from which it was originally borrowed. Credit therefore, it will be seen, comes largely in aid of capital in all these operations. It is credit which has furnished the merchants of New York with by far the greater portion of their available means, by which they have been able to monopolize so large a portion of the Southern trade. It is not intended to intimate, that the introduction of an increased amount of capital is not indispensable to any great extension of our direct trade—all that we mean to say is, that the amount required will not be so great as is commonly supposed—certainly not so large as to oppose any insuperable obstacle to its acquisition. Our banks have already done much, and will doubtless do much more, to further an object in which these institutions, in common with the whole community, have the deepest interest. Under a recommendation made by a former convention, some of our banks have established credits in Europe, the use of which has, to a considerable extent, been given to the direct importer on the most liberal terms. It is very desirable that all of these institutions should follow this example. But the furnishing credits in Europe is not sufficient; the banks must likewise enable the importer to realize the price of his goods sold on credit to the country merchant, in time to meet his engagements to those institutions. This can only be effected by freely discounting the paper received for these goods, "whether the same shall have more or less than six months to run." The co-operation of the country banks in collecting and remitting the proceeds of such paper to the banks on the sea-coast, will also be extremely desirable. We are aware that there are limits to business of this character, which the banks cannot prudently transcend. But we are satisfied, that if all of the banks in our Southern and South-western importing cities would

Princes," we may reasonably hope to see them occupying a station and performing a part equal in dignity and importance to that of the most elevated ranks in society.

agree to lend themselves to this object, so far as they could with a due regard to their own safety, the aid thus received would go very far indeed to advance the direct trade. But the great source to which we look with entire confidence for the supply of all deficiencies in this respect, is the introduction of foreign capital. While England, our great customer, is abounding in capital seeking investments at half the rates of interest allowed in this country, what but a want of *confidence* (resulting from a want of *information*, and of established commercial connections here) could possibly prevent the introduction of any amount of British capital necessary to carrying on the direct trade between Europe and America. We know that before this trade was driven from our ports by the causes already stated, foreign capital was to a very large amount actually employed in that trade—that British houses were established here, and that a very successful business was thus, for a long time, carried on. Why should not this business be now revived? Let the proper measures, then, be taken to inform foreign capitalists of the opening now presented at the South for the profitable employment of their capital among us. Let them be induced to establish agencies and to form copartnerships among us, for carrying on the direct trade. Let them be brought to unite with us in the establishment of regular lines of packet ships and steamers, to arrive at stated periods at our principal ports—and our work will be done. And can they not be persuaded to do this? To effect it, nothing more can be necessary than to give them the requisite information. A commission composed of a few of our most intelligent and experienced merchants, charged to make known the wants and resources and desires of the plantation States on this subject, would, we are satisfied, find no insuperable difficulty in effecting the object, either in England, France or Holland. Let them be authorized to say in our behalf, that the whole Southern and South-western country has been raised up from its lethargy, and is now not merely deeply sensible of the vast importance of this trade, but unalterably determined to establish and extend it. Let them go prepared to exhibit our resources, and invite them, in the name and behalf of our people, to unite with us in doing whatever may be necessary to establish a direct import and export trade on a permanent basis. Let the avenues already opened, and daily extending in all directions, for the transportation of goods into the interior for the supply of the wants of that vast and fertile region, be pointed out to them, and the transcendent importance of these connections be fully explained and illustrated—and above all, let them be assured, that in engaging in this business, they will find among our people a general disposition to countenance and support them by all the means in our power—and we cannot bring ourselves to believe that the merchants and capitalists of Europe, can be so blind to their own interests, as to hesitate to engage at once in the work, with that spirit which characterizes all their enterprises.

Such are the various resources to which we may look with a becoming confidence for the creation of the capital and credit necessary to the perfect success of our great scheme. It will be seen that they are abundantly sufficient. It is by no means essential to our success, however, that they should all be brought at once into full operation.

The good work once begun, must and will go on. We have dwelt thus largely on this point because it presents to the minds of practical men the greatest difficulty in our case.

2d. INTERNAL IMPROVEMENTS.—Equal in importance to the creation of a sufficient capital for carrying on the direct trade, is the furnishing a market for all the goods that can be imported—indeed, it may be assumed as indispensable to our success, that railroads, canals, and turnpikes, must furnish the great channels of communication through which the goods brought into our ports must find their way to the consumers in the interior. Fortunately for our enterprise, the Southern and South-western States are now engaged in various schemes of improvement, all having in view the extension of the connection between their commercial cities and the inhabitants of the interior. From Virginia to Florida inclusive, and from the Atlantic to the Mississippi and the Ohio, railroads are everywhere in progress, which, when completed, will afford the ready means of supplying our whole interior country with foreign goods in the shortest time, and on the cheapest terms. By these several lines of communication, the country merchant will find a ready access to our ports, where he will be able to lay in his supplies on at least as good terms as he could in New York, in addition to the saving of time and money, in avoiding the tedious and circuitous routes through which he now receives his supplies from that city. In the mean time, and until these railroad connections can be established, prompt measures should be adopted, and especially by railroad companies, to establish lines of communication by wagons, from the *termini* of these roads to the points where a demand may exist for the goods so transported. In the "Address to the Citizens of the United States," issued by the Convention which assembled in Augusta in October last, statements were submitted which showed conclusively that the cost of importation from New York to the interior towns of the Southern and South-western States, greatly exceed what would be incurred on the importation of similar goods through our own ports when conveyed by railroads into the interior, even if charged with the highest rates of transportation. From that statement it appeared that while the expenses now incurred on the importation of $10,000 worth of goods from New York into Montgomery, Alabama, amounted to $1,383, the same amount of goods might be received by railroads through Charleston or Savannah, at a cost of $451, making a saving, by means of the direct trade and railroad transportation, of $931 34, upon an investment of $10,000; and if the purchase were made in Mobile, and the goods transported by the river, the difference would be still greater. Results equally striking are exhibited on a similar importation to Knoxville, Tennessee. It has indeed been ascertained that on 362,000 lbs. weight of goods imported into Knoxville by a house in 1836, the first cost of which was $70,000, and brought by land and water from Baltimore, New York, Pennsylvania, and New Orleans, the charges amounted to $13,750—near 20 per cent. on the first cost, the time required being on an average sixty days; while the time required by a railroad would be three days, and the charges would not exceed $5,068—less than one-half of the present cost.*

* See address in behalf of the Knoxville Convention, p. 14. Now that Charleston is

We refer to these cases merely as affording an illustration of the facilities that will be afforded by railroads for the disposal of all the foreign goods, that, under a system of direct trade, can be brought to our ports in exchange for our productions. The two branches of this system are so interwoven with each other, that they cannot be separated without the destruction of both. We have constantly before our eyes, however, a striking example of the effect produced by these communications with the interior upon the course of trade, which it is proper we should refer to, because the members of this body will now be enabled to inform themselves fully upon the subject. The Charleston and Hamburg railroad has already, in a great degree, effected a revolution in the trade of this city.* Seconding the efforts made by a number of public-spirited merchants, who have engaged largely in the wholesale importing business, the Directors of this road have been enabled to furnish facilities to the country merchants for visiting this city, and inducements for laying in their supplies here, which have already enlarged the business to an extent far exceeding the expectations of the most sanguine of our friends. Indeed, under the impulse which the public mind has here received by the proceedings of our Convention, the construction and projection of railroads, and the revival of trade, calamities which at former periods of our history might have left Charleston for many long years a mouldering heap of dust and ashes, have served only to invigorate her efforts, and strengthen her resolution, and thus to lay the

connected with the Tennessee river and the valley of the Mississippi, these reflections will more naturally occur. Charleston is rapidly building railroads to her mountains.

* HISTORY OF THE CHARLESTON AND HAMBURG RAILROAD.—Alexander Black, Esq., of Charleston, politely furnished us, when in that city, with one of the first annual Reports of the Board of Directors of this road in 1833. From this we learn that the books of the Company were opened for subscription 17th March, 1828. Half the stock was taken. The Company was organized May, 1828. There was but one other road in the Union, the Baltimore and Ohio, which at all approached this in contemplated magnitude. The Board constructed an experimental road of 5 miles in length, which we remember to have seen worked by wind and sails as a school-boy holiday. In Aug. 1830, the stock was increased to $581,340 and the road at once authorized. On 15th November, Mr. Allen, as chief engineer, examined the route of location. He reported a line 14 miles shorter than expected and 5 miles less than the commonly traveled road. On 28th Dec. Messrs. Gifford, Holcomb & Co., contracted for building 4 miles of road, and 17th March, 1831, Messrs. Gray & Conty contracted for 30 more. The Eastern division to Branchville, 62 miles from Charleston, was opened for public traveling 7th Nov., 1832—being one year ten months and twenty-one days from its commencement. On 7th May it was opened to Midway, 72 miles. In May 1833, says the Report of Major Black, "the track is opened by felling the trees, two hundred feet wide, throughout the line, except within nine miles of the city, and a few miles in the valley of Horse Creek near Hamburg, which has been deferred, owing to the reluctance of some of the landholders to have their timber destroyed.

"The excavations are entirely completed. Ditches and lateral drains, sufficient for present purposes, are formed. All the bridges to accommodate the public, neighborhood and plantation roads are built; the foundation, whether consisting of piles, sills, sleepers, or trussel work, is completed for the whole distance of 136 miles; the caps and transverse pieces are permanently fixed on for the distance of 135¼ miles; the rails are laid and keyed, for 134¼ miles; all requisite braces or stiffening to strengthen the road is completed for 134 miles; the iron is spiked down permanently for 98 miles; and the surface is prepared for 24 additional miles. Nine turn outs or passing places have been constructed; twelve pumps or watering-places have been established. The iron for Ware's contract, 6 miles, is delivered, and the balance of the road has its surface prepared for the reception of the iron, except about 14 miles.

"Amidst the many disappointments and difficulties, necessarily arising in an undertaking so novel and extensive, it must be matter of gratulation to reflect that the line of railroad, now finished, on which our engines travel, is greater in extent (in consecutive miles) than any other in the world."—EDITOR.

foundations of a more deep-rooted and abiding prosperity. The same influence has been felt in Savannah and Augusta, and indeed in all the cities of the Southern and South-western States where similar works of internal improvement have been executed, or are now in progress. So far, then, as this branch of our scheme is concerned, it is only necessary that we should persevere. We will only add, that these great works should be carried on in a liberal and patriotic spirit, without jealousy and distrust, with a determination to build up in the Southern and South-western States ONE GRAND SYSTEM, every portion of which, like links in a common chain, may tend to bind together all of its parts.

3d. LINES OF PACKET-SHIPS AND STEAMERS.*—The last point to which we deem it necessary particularly to advert, is the establishment of a regular line of packet-ships and steamers. This we deem to be indispensable to any success at all commensurate with our just expectations, or the vast extent of the productions and resources of the Southern States. Practical merchants alone can duly estimate the importance of being able to command their supplies from abroad, *at all times*, and at the *shortest notice*. The state of the markets, and the actual or expected demand for goods, must regulate importations, and if these goods cannot be *directly* imported when they are wanted, they must be imported through New York and the other Northern cities. It is true that the extension of the direct trade will of itself have a tendency to supply the requisite means for carrying it on, both as respects capital and ships; but as a first step it would be of incalculable importance that a regular line of packets to our principal sea-ports should give the same facilities to our Southern importers that are now enjoyed by those of New York. With these facilities our merchants would be enabled to enter into fair competition with the merchants of New York, Philadelphia, and Boston. We have already indicated the best, if not the only means of effecting this object. We recur to the subject here only to impress as deeply as possible upon the minds, not only of the members of this body, but of our merchants and fellow-citizens generally, the absolute necessity of exerting themselves *promptly* and *strenuously* for the immediate removal of this difficulty. Something may be effected by a concert of action among the ship-owners now engaged in the direct trade; but it is chiefly by the formation of companies or co-partnerships, composed of American and British Houses, that success in this object is to be secured. In one way, however, we may all render essential aid, not only in the accomplishment of this object, but in promoting all those measures on which the success of our whole scheme depends, viz.: by contributing to enlighten the public mind, by acting on public opinion, and exerting an influence in every way for the promotion of the object. If the people in this quarter of the Union could become duly impressed with the magnitude of this question, and the vital interests involved in it; if they could only be brought to feel in all its force the withering influence of the existing system on their prosperity and welfare; could they but realize the immense losses annually sustained by our being rendered tributary

* This day has already come, and we are to have lines of Southern steamships to New Orleans and Cuba.—ED.

to the cities and merchants of the North, and perceive the incalculable advantages that would flow from the establishment of the COMMERCIAL INDEPENDENCE of the South and South-west—then might we confidently rely on the continued display of that noble zeal, that determined energy, and untiring perseverance, which, trampling down all opposition, would in the end assuredly crown our efforts with triumphant success.

In the attempt to enlighten the public mind, and influence public opinion on this subject, there is one instrument which may be successfully used, not only for the accomplishment of our present object, but also for the protection of all the other great interests of the slave-holding States—we allude to the establishment of one of those periodicals which, in modern times, has been found to exert almost a controlling influence over the sentiments and opinions of mankind. If the PRESS has effected a revolution in the moral condition of the human race, and is still found to exert a supreme dominion over the mind of man, one of the most imposing forms in which its mighty power has ever been exerted, is that of REVIEWS, which, conducted by master minds, and embodying the great truths of science, philosophy, and politics, are well calculated to form and control opinion, and thus to direct the conduct of men. While other quarters of the Union have such organs, through which to disseminate their principles and opinions, and to maintain the policy best adapted to their situation and institutions—the slave-holding States will never stand on an equal footing, until they too are possessed of a faithful exponent of their principles. The revival of the Southern Review is, therefore, an object of great interest to the South, and we would earnestly recommend that the earliest occasion should be seized for its re-establishment on a permanent basis.*

In prosecuting the views which have been thrown out for the consideration of the Convention, we utterly disclaim any unfriendly feeling toward our Northern brethren, or any portion of the Union. Though we openly avow our object to be the restoration of our trade, we shall attempt to effect it only be fair and honorable means, and in a spirit of generous rivalry. And though we have strongly deprecated the "unequal action of the Federal Government," which, under a system of high duties, and extravagant expenditures, has operated so injuriously to our interests—yet we present these views, not in the language of *complaint*, much less in a spirit of *disaffection*—but as truly indicating the causes of the evils for which it is now proposed to provide a remedy. Nor do we wish to be understood as intending to exclude the productions of the northern States from our estimate of the advantages to be derived from a *direct trade*. Our object is, a free and open trade with the whole world—and all that we desire is, that in carrying on this trade, whether at home or abroad, our own ships and our own capital should be duly employed, and our merchants be allowed to participate in its advantages.

* The Southern Review has been revived, and is now under the able conduct of Milton A. Clapp, Esq. We believe that the whole South should sustain it, and as we rest our own claims too as a southern commercial work upon a common foundation, we invoke in our service and aid some portion of the spirit manifested by the convention in the above passage.—ED.

Art. VIII.—THE CIVIL LAW.*

Explication Historique des Instituts de l'Empereur Justinien, avec le texte, la traduction en regard, et les explications sous chaque paragraphe. Précédée d'une Généralisation du Droit Romain. Par M. Ortolan, Professeur a la Faculté de Droit de Paris. Paris. 1844.

Manuel de Droit Romain, contenant la Théorie des Institutes, Précédée d'une Introduction a l'etude du Droit Romain; par F. Makeldey, ancien Conseiller Intime de Justice de S. M. le roi de Prusse, Professeur Ordinaire de Droit à l'Université de Bonn. Traduit de l'Allemande par Jules Beving, avocat à la cour d'appel de Bruxelles. Bruxelles. 1841.

The study of the Civil Law is daily becoming more common among the members of the American bar. Its principles of universal justice are gradually winning their way into favor. To America belongs the honor of having broken through the method of treating legal subjects, so universal and so long established in the country from whence we derive our judicial system. The most noted textbooks of the law in England, are little else than collections of adjudicated cases, arranged with more or less method, and condensed with more or less ability. English lawyers, with few exceptions, seem entirely ignorant of the luminous order, the scientific arrangement, and comprehensive generalization of the civil law jurists. They are to this day liable to the criticisms of Legare—severe but expressive. "The most that can be said of them is, *par negotiis, neque supra.* None of them stand upon that 'vantage ground,' of which Bolingbroke speaks. They are mere *pragmatici*—who treat their subjects in a strictly technical manner, and whose whole system of logic consists of a case in point." The American student owes much to Mr. Chancelor Kent and Mr. Justice Story, for boldly engrafting the spirit of the Roman Code upon the sturdy trunk of the Common Law. They have set an example to the jurists of the United States, which has not been lost upon them, and which deserves to be followed by those of our fatherland.

The lucid method, the subservience of precedent to principle, and the enlarged views of justice, so conspicuous in the jurisconsults of the Civil Law, ancient and modern, are becoming the property of the American jurists. The elder Story has luminously arranged the general principles of equity jurisprudence, to be found in the *digests* of Fonblanque and Maddock; and Greenleaf and the younger Story have ably epitomized and reduced to order the ponderous collections of Starkie and Chitty, jr. The asperities of the common law are beginning to be ameliorated by a judicious intermixture with a system, the result of the intellect of the greatest people the world has ever seen, working through a period of thirteen hundred years. We have reason to hope that the time is not far distant when the common and the civil laws shall have been mutually rendered more perfect by the mingling of the superiorities of both—when the universal

* It does not fall without our plan to give to law its passing tribute; though philosophical disquisitions we may avoid. The paper which follows is half of a contribution with which we have been favored. However able it may be, we would have greatly preferred an article on the law of debtor and creditor in Tennessee or in any other State as matters of "*practical law;*" or what the author in his private letter promises us, an article or articles relative to the "History and statistics of the State of Tennessee." We trust it shall soon be forthcoming.—Editor.

principles of justice, to be found in either, shall have been blended and combined into one—and when a code of law more just and perfect than any separate system shall have been formed by a combination of all that is admirable in either. Then, indeed, we may apply to the law the so oft quoted expression of Lord Coke, that it is the "perfection of human reason" (Coke Litt., 97, b., and 232, b.), which seems so out of place in the cumbrous and uncouth law of real property, as collected by that learned judge. Then, too, may become applicable the repeated suggestion of the same writer to the student, to study the reason of the law (Coke Litt., 183, b., 232, b.), for then alone will there be any reason in such advice.*

That Rome should have built up so enlarged a system of jurisprudence, is often a subject of wonder. Her continuous military career, the perpetual commotions among her restless people, would seem to be incompatible with improvement, much less comparative perfection in that department, apparently so exclusively suited to flourish in a state of peace and quiet. How could the temple of Justice rise in such goodly proportions in the midst of incessant strife, internal and external? It is not our intention to devote the present paper to a solution of this question. One or two general observations are all that we can permit ourselves to make.

The Common Law may be considered as dating its origin from the conquest of William the Norman, in the 11th century. It is true, that previous to that period, the Saxons may have made some advances in legal science. English historians still refer to the days of Alfred as a kind of Saturnian period in their career as a nation—and the age of that great monarch is looked upon as an era in the judicial history of the British people. But the Norman conquest, unquestionably, destroyed the entire system of Saxon law. The establishment of the feudal system, with its peculiar relation between lord and vassal, and its destruction of all importance attached to the possession of any but real property, sufficiently attest the truth of this remark. The few traces which the legal antiquarians of England may have discovered in the law as it has existed since the conquest, of the institutions of their Saxon sires, only serve to show the extent of the revolution. Since that period eight centuries have elapsed. How wonderful has been the change! How rude were the first elements of the law in relation to the rights of persons! How silent and non-existent in relation to personal property and mercantile transactions! How cumbrous, nay, barbarous, in relation even to real property! From these rude beginnings, in this period, how magnificent a science has been produced—embracing every department of life—every modification of property—every relation of the

* By the way, it is not a little strange, that the expression of Lord Coke, in relation to law being the perfection of human reason, should be dwelt on with so much complacency by the common lawyer, when we consider the context, "Nihil quod est contra rationem est licitum," for reason is the life of the law, nay, the common law itself is nothing but reason; which is to be understood by an *artificial perfection* of reason, gotten by long study, observation, and experience, and not of every man's *natural reason*; for, Nemo nascitur artifex (Co. Litt. 97, b.) One can easily fancy the astute old commentator himself smiling at the idea of defining the law of warranty in his day as the "perfection of *natural* reason"—or, in fact, of any reason except *strictissimi juris*, an "*artificial* perfection of reason." Of a truth, as to such reason, *nemo nascitur artifex*.

human family. It is true, the common law has enjoyed the benefits of the rich treasures of Roman lore; but how little has been borrowed from these sources, exclusive of some few well-known branches of the law, is familiar to every person, at all conversant with the narrow spirit of jealousy toward the civil law, which has in every age influenced the expounders of the common law. It may safely be said, that the more perfect parts of our law have been least indebted to the collections of Justinian; such, for example, as those which relate to civil and political liberty, to personal rights, and to the different relations of men in a state of society. Eight centuries have sufficed to build up the present system of English and American jurisprudence.

The result of modern investigation would give to Rome a much earlier date than the one commonly received. Long before the age of Romulus, nations or tribes existed in established society, where subsequently stood imperial Rome. The rude institutions of these aboriginal tribes, were unquestionably incorporated into, and became a part of, the laws of him who is commonly reckoned as the founder of the Roman empire. It seems equally certain that these laws, improved by the lapse of snbsequent centuries, modified and changed by senatorial and democratic enactments, were condensed into the twelve tables. Niebuhr emphatically remarks, that the twelve tables were nothing more than the ancient statutes customs and institutions, consolidated. And such is the opinion of all modern investigators—Gravina, Gibbon, Bonamy. The intrinsic evidence of the tables themselves clearly demonstrates a Roman origin. If, then, we take the commonly received date of the building of the city as the commencement of the civil law, we shall have a period of thirteen hundred years from that time to the age of Justinian. This single fact appears sufficient to explain the perfection of the Roman law, when we consider the unquestionable capacity of the Roman mind. It would be impossible, it seems to us, for any nation possessing the Circassian intellect, to flourish through so long a period, without attaining to a high degree of perfection in everything pertaining to the rights and duties of men in a state of society.

It is certain that no nation, of whose history we have any record, presents so unvaried a picture of internal disorder and external conflict, as the Roman people. From the cradle to the grave, war, in all its forms and varieties, marks her course. Externally, she fought, at first for existence, and afterward for the conquest of the world. Internally, her restless *demos* in the beginning contended with the patrician for supremacy; then her servile population strove for political privileges; and subsequently her prætorian soldiery drenched her fields with fraternal gore. Nevertheless, a state of war seems by no means incompatible with a flourishing legal system. The history of England is even more replete with civil commotions than the era of the kings of Rome; and not even the imperial city carried on more incessant foreign wars than the Saxon Isle. In truth, high and continued excitement seems not opposed to improvement and progress. Every faculty of the mind is roused to action. The succession of great men which marks every period of ancient Rome—the equally conspicuous array of English genius—the superior men who

render memorable our own revolution—and the blaze of intellect which encircled the narrow soul of Robespierre and the mighty mind of Napoleon—all inculcate the startling paradox, that excitement and commotion foster and bring forth intellect, and that inaction tends to lower human capacity.

Her continued career of victory and prosperity, moreover, must have aroused all Rome's latent talent. Success, perpetual and unexampled, intoxicated her people. This fictitious exhilaration would of itself suffice to explain much that appears inexplicable. That must indeed be a dull nation which is not aroused by universal victory and conquest. Man's mind, it is a remark the world over, expands with his circumstances and his responsibilities. The same equally holds good of nations. The belief of superiority aids much in the improvement of a people. The victories of the first Stadtholders made the proverbially dullest nation in Europe, for a time, take an elevated stand among the contemporary nations. Prussia owes everything to the wars of the great Frederick; and the Emperor of Muscovy might have been burrowed in perpetual snow, but for his conquests over the Swedes, the Turks, the Poles, and the French.

In addition, Rome was emphatically a nation of law—her people a law-abiding race. In this she stands pre-eminent above all nations, ancient or modern. Strict observance of her rules and ordinances marks every portion of her career. The child owed abject submission to his father, the soldier to his general, the client to his patron, the slave to his master—even the debtor to his creditor. The parent was armed with life and death over his offspring: the commander could decimate his soldiers for cowardice or disobedience; ingratitude to patrons was punished with death; and death could be inflicted upon a refractory slave. No nation, ancient or modern, can show as strong an array of severe laws, so subserviently obeyed. Can it be a subject of wonder that a nation, so constituted, should have built up a system, lasting as time, and boundless as the limits of the earth?

There are three methods of treating of the Roman law. First, the exegetic—or the explication of the sources of the law which have reached us, according to the rules of criticism and interpretation. Socond, the dogmatic—or the systematic exposition and development of the principles drawn from the sources of the law now in force. And third, the historic method—or a history of the sources of the law, and, in particular, of the origin and progressive formation of each branch of the law.

Each of these three methods of treating the positive laws, has its own peculiar merit and utility, and neither can entirely dispense with the other. The student must not confine himself to any one to the exclusion of the rest. They mutually aid each other, and, like the different branches of the common law, must be studied in order to appreciate the whole. The explication of those sources of the law—those works and collections which have come down safely through the course of ages—forms the first and most important base of the study of all positive law. The dogmatic method shows us the law actually in force in its practical application—while the history of the law indicates the reasons, historical and political, of the law as it may

exist at any specified period, and enables us to understand its spirit and true intent. No system of laws can be fully mastered without a union of these different methods. A knowledge of the requirements of a particular code would be but a barren acquisition, without some knowledge of its rise and progress, and some reference to its sources. The American student may gain an acquaintance, both pleasing and instructive, with the beauties of the code about which we are treating, by making himself familiar with such works as are easy of access and open to all. Gibbon's beautiful sketch in his matchless history, Kent's masterly analysis in the first volume of his commentaries, Cooper's Justinian, Evans' Pothier, and that portion of Adams' Roman Antiquities more particularly devoted to the Roman laws, will enable the purely English student to appreciate some of the merits of that system which has been the object of admiration to all modern intellect. Taylor's work on the civil law, and the English translation of Domat, may enable him to quaff more abundantly. Of course, a more intimate knowledge can only be obtained by recourse to collections of the law itself—the *corpus juris civilis*—and a perusal of the works of some of the great European commentators, which have not yet assumed an English dress. The work of M. Ortolan, which we have prefixed to these pages, has obtained considerable celebrity in France as a comprehensive comment on the Institutes of Justinian—and the Manuel of Makeldey has even greater popularity, among German students, as a masterly epitome of the Roman law.

Professor Ortolan commences his commentary by what he calls a generalization of the Roman law. "It is not without motive," he says, "that I have adopted the title of generalization. The rules of the Roman law are, for the most part, especially in the imperial constitutions and in the fragments of jurisprudence, contained in particular decisions of different kinds. In order to extract them, it is necessary to perform a veritable operation of generalization. This operation is even the more necessary when it is desired, as I have attempted in this introduction, to sum up in few words the historical changes of legislation, and of giving, in relation to each subject, the ruling thought (la pensée la plus générale) of each period." He divides his introduction into two parts, in the first of which he treats of law (droit) and the elements of its production—in the second, of rights (droits) and of actions. And, with the usual methodical arrangement and acute discrimination of the civil law writers, he subdivides until a common lawyer becomes almost bewildered by his numberless general ideas. He accompanies each paragraph of the Institutes by a comment explicative and historical—and, at intervals, goes at length into the origin and progress of the Roman jurisprudence in particular branches—and concludes each natural division of subjects with a general summary. Such a work is a decided desideratum to the American student. The ordinary edition of Justinian's Institutes, edited by the late Thomas Cooper, of South Carolina, is little more than a naked translation, the Latin text being by no means pure, with some references to common law decisions. It is easy to see that much of the spirit and beauty of the Institutes is lost, without some additional assistance. It requires an exegetic, historical comment, like that of Prof. Ortolan, to enable him to understand and

appreciate the labors of Trebonius and his compeers. M. Ortolan, in our opinion, as a legal commentator, has one fault, not uncommon in his fellow-countrymen—a too great fondness for fine writing. He is a little too wordy. We should admire his work much more if couched in the plain but perspicuous style of Pothier. His work may be recommended, however, as supplying a want sensibly felt by the student in his first entry upon the broad ocean of civil jurisprudence.

Of Makeldey we can speak in terms of more unmeasured praise. He begins with an introduction containing information, general, historical and literary, necessary to the study of the Roman law. We cannot give a better idea of this excellent summary, than by quoting the contents of this introduction. It is divided into six sections.

The first treats of "the general ideas of law, and of jurisprudence."

The second, of the history of the sources of Roman law, divided into four periods: 1st period, from the foundation of Rome to the XII. tables; 2d, from the law of the XII. tables to the age of Cicero; 3d, from Cicero to Alexander Severus; and 4th, from Alexander Severus to Justinian.

Section III., of the fate which the Roman law experienced after the time of Justinian—1st, in the East, and 2d, in the West.

Section IV., of the introduction of the Roman law into Germany, and of the use which is made of it at this day.

Section V., of the collection of the sources of the Roman law—of the *corpus juris civilis*—of its parts and of its different editions.

Section VI., of the different methods of reference, and of the bibliography of the Roman law: 1, ouvrages bibliographique; 2, ouvrages lexicographiques; 3, ouvrages hermaneutique; 4, ouvrages exegetiques; 5, Histoires et antiquites; 6, ouvrage dogmatique.

This last section contains a "bibliographie choisie du droit Romain"—a choice selection of civil law writers, quite as formidable as would be a list of common law commentators. It will be seen, that this introduction gives the student quite an insight into many subjects connected with the study of the civil law—a sort of bird's-eye view of the magnificent prospect—and, at the same time, by its catalogue of books, affords him the means of extending his researches as far as his inclination or leisure may permit.

The Institutes of the Roman law follow this introduction, divided into a partie générale and a partie speciale. In the former, the writer generalizes the principles of the Roman law as in force in Germany—being more limited than the generalization of Ortolan, in this, that it is simply dogmatic, not historic, exegetic, dogmatic. The second part contains a succinct epitome of the Roman law, designating that which is in force in Germany, under the titles of: 1, real rights (rights of things, to use Blackstone's language, but comprehending both real and personal property); 2, obligations; 3, of rights of family (droits de famille); 4, of the law of succession; and 5, du concours des créanciers—a head of less general interest. This work of Makeldey is not confined to the Code, Pandects and Institutes, but embraces such of the subsequent Novels of the emperors as have been glossed or commented upon, and which are in force in Germany. We cannot refer the inquisitive student to a more excel-

lent work, with which to begin his acquaintance with the body of the civil law.

With such aids, what would otherwise be a task becomes a labor of love. There can be no more interesting employment than the tracing laws to their origin, investigating their causes, understanding their reason and their effects, and imbibing the full spirit of the enlarged lawgivers. It is equally pleasant and instructive to compare the common and the civil law, to note their diversities and their resemblances, and to search into the causes which have led to similar or different legislation upon the same subject-matter. It is to be hoped that our subsequent remarks, wherein the above objects have been kept in view, may not prove altogether unprofitable or uninviting to those who may be desirous of becoming acquainted with a branch of the Roman law little known to the common law bar.

In the beginning of all judicial systems, form predominates over spirit, or even substance. A rude and barbarous people require outward signs in all proceedings. It is only after they have become more refined, and knowledge has been largely disseminated, that the outward covering of visible, tangible acts is cast aside, and the spiritualized system shows itself in naked beauty—truly, when unadorned, adorned the most. The uneducated man needs something material, outward, to fix his attention. An act purely mental is to him no act. The senses, the physical impressions, have more influence than intellectual impressions. Form is the visible, sensible appearance, says Ortolan, the material element, the terrestrial garment given to the thought. Writing being unknown, or little practised, the acts of men, the presence of witnesses, the performance of some manual deed, must supply its place. As civilization advances, judicial institutions, as everything else human, become more spiritual. Men begin to be capable of appreciating the idea, without the outer habiliment. Finally, form is entirely dispensed with, only so far as it may be absolutely essential to reveal the will and intention. These facts are remarkably exemplified in the two systems of law now battling for supremacy among the moderns—the common and the civil law. The *alienatio per æs et librum*, the *manuum consertio*, the *hasta* used at public sales, the glebe—portion of soil carried before the prætor in controversies about land—the touching of the ear in calling upon witnesses to testify to a summons, exemplify strikingly this feature of the primitive Roman jurisprudence. The pure civil law, as contradistinguished from the *jus gentium*, *jus naturale*, and prætorian law, is full of these acts, introduced to satisfy the desires of a rude people for tangible appearances in judicial proceedings. The primitive common law was equally prolific in such outward signs—from the delivery of seizin by actually going upon the premises and delivering to the party a visible object, to the earnest penny given to bind the bargain. Both systems underwent the same process of change. The symbolic act, so essential at first, gradually fell into desuetude, and ceasing to be understood became ridiculous. The forms of his forefathers are the mirth and ridicule of Cicero (pro Murena XII.), as are those of the common law the subject of amusement to the author of the Comic Blackstone.

The strictness in unessentials, which marked the course of the com-

mon law with such frequent instances of glaring injustice, was equally conspicuous in the early Roman jurisprudence. In each system certain forms of procedure, applicable to the varying wants of litigants, were invented, and strict adherence imperatively required. The variation of a word, as will be seen presently, was as fatal in the one as in the other. But the parallel stops not here. As the Roman lawyers endeavored to conceal these forms from the common people by profound secrecy and varying auspices, so the common law jurist locked up the secrets of his science in verbose formulæ and a barbarous law idiom. As centuries were required to throw open the road to all in the one case, so was it also in the other.

It is remarkable, also, that the same steps were taken in both systems to obviate these glaring defects, and to simplify the science of law. Fictions were at first resorted to. They were intended to produce a transition from the primitive law, rude and inflexible in its forms, to a law more just and equitable. To extend the results or consequences of the laws to cases which are outside of its dispositions, or to obviate the effects of a too rigid adherence to the letter of the law, a resort is had to the supposition of facts which never existed. Fines and common recoveries, the fictitious actions of ejectment and trover, will immediately occur to the student of Coke and Blackstone. The Roman system was even more prolific in this respect than its rival. The *jus postliminium*—by which a citizen taken by the enemy, if he returns, is considered as never having left the State; and if he never returns is supposed to have died at the moment he was taken (Dig. 49, 15, 16); the supposition in one case that the right of prescription had been acquired, when in reality it had not (Inst. 4, 6, 4—Gai. 4, 36), and the supposition that it had not been acquired in another case, when in truth it had (Inst. 4, vi., 5), in order to effect the ends of justice; the assuming the quality of citizen in a stranger (Gai. 4, 37); and the existence, contrary to the truth, of the quality of heir (Gai. 4, 34);—are a few of the instances in which a sense of equity has compelled a resort to fiction in order to obviate deficiencies or severities in the civil law.

The formation of a new court, acting upon entirely different principles from the courts which administered the primitive law, was another mode of escaping the stern letter of the law adopted under both systems. The honorary jurisdiction of the prætor at Rome, and the equitable jurisdiction of the keeper of the king's conscience in England, owe their origin to precisely the same causes; and the result, in both systems, may be said to have been similar. The unnecessary forms of the common law, as has happened long since with most of its actual inconsistencies and iniquities, are fast disappearing, outside of all statutory enactments, under the ameliorating influence of equitable principles. The rude and barbarous code of the twelve tables, and the superstructure built thereon, gradually waned under the liberal edicts of the prætor, until the last remnants were swept away by the unsparing hand of the imperial innovator.

"The law," says Prof. Ortolan, "is, at first, that which is ordered, a rule prescribed by the legislative power. Afterward, it becomes *quod semper æquum et bonum est* (Dig. 1, 1, 11, f. Paul), *ars boni et æqui* (Ib. Ulpian)—that which is always good and right—a defini-

tion altogether spiritual." The civil jurisconsults, far more even than my Lord Coke, dwell on the necesssity of the existence of reason in law. "Quod vero contra rationem juris receptum est, non est producendum ad consequentias" (Dig. 1, 3, De Leg., 14, frag. Paul.). "In his quæ contra rationem juris constituta sunt, non possumus sequi regulam juris" (Ib. 15, frag. Julian). "Quod non ratione introductum, sed errore primum, deinde consuetudine obtentum est: in aliis similibus non obtinet" (Ib. 39, fr. Cels.). How very like my Lord Coke: "Ratio est anima legis (1 Inst. 394, b.); lex plus laudatur quando ratione probatur"—the reason of the law is the life of the law (Ib. 183, b.). "Nihil quod est contra rationem est licitum" (Ib. 97, b.). "Lex humana est quoddam dictamen rationis, quo diriguntur humani actus" (2 Inst. 56). Peradventure my Lord Coke may have sipped some little from the stream of the civil law through the intervention of Bracton. "Lex est sanctio justa," says that writer, "jubens honesta et prohibens contraria."

The student of the common law will find in his study of the civil law, at every step, something to remind him of his own admired system. He will discover that the resemblances are not confined to generalities. He will observe many particulars, not confessedly drawn from this source, so analogous as to leave him in doubt whether they were not transferred from the Digest to some of the early collections of English law. The pleadings, as we shall presently see, both when *vivâ voce* and afterward, when reduced to writing, present points of striking resemblance, and were intoduced for the same object—the reducing the controversy to a point for trial by the country. The functions of the *judices* and *centumviri*, it is generally supposed, were similar to those of a modern jury. In this connection, we cannot forbear calling attention to the fact, that the interdict, *de libero homine exhibendo*, was precisely our writ of *habeas corpus*. It was an order addressed to any one who detained a free man, and required his instant production. "Quem liberum dolo malo retines, exhibeas." It was granted instantly upon the demand of any person. The analogy is so striking as to be noticed by Ortolan himself: "Le writ d' habeas corpus," he says (Général., §100), "de l'Angleterre n'est pas autre chose." We may also notice the equally remarkable coincidence in the well-settled principle of both laws, that a man's house is his castle, and may not be broken into for the purpose of serving civil processes. "Plerique putaverunt," says the Pandects, "nullum de domo sua in jus vocari licere, quia domus tutissimum cuique refugium atque receptaculum sit, eumque, qui inde in jus vocaret, vim inferre videri" (Dig. 2, 4, 18).

One of the most valuable portions of the work of M. Ortolan is his admirable analysis or exposé of the different judicial systems which prevailed among the Romans. In the common law the practice of the courts has been uniformly the same. At the date of the conquest of William the Norman, the system which seems to have prevailed among the Franks and Lombards, borrowed perhaps from one of the Roman systems of procedure, was introduced into England. See, upon this subject, the appendix to Sergeant Stephens' luminous work on Pleading, notes 28 and 37, where the probable origin of special pleading is acutely discussed. The plan in Eng-

land, since that date, has been to reduce the matters in litigation to as few points as the nature of the subject would admit, so that the parties might know the evidence necessary to be introduced, and the jury might be able to pass upon the questions of real difference. At first, this was brought about by oral allegations, made by the litigant parties, or their counsel in open court, afterward by allegations in writing. While the practice was still in its infancy, inconsistencies and variations doubtless occurred. But the science of special pleading soon assumed its present shape, and has continued, in substance, to be the form of procedure in the courts of common law down to this day. The points of resemblance between this system and the early system of judicial procedure at Rome will presently be pointed out. In our chancery courts, the proceedings have always been by bill and answer, that is, statements at large by the parties of their demand and defense. Among the Romans we find, however, in the conduct of suits in court, three periods of marked distinction; not that these periods are clearly separated by a point of time—the one terminating abruptly, and the other commencing *eo instanti;* on the contrary, these systems gradually run into each other, rendering it difficult to designate with absolute certainty the exact steps which produced the change. Nevertheless, it is easy to distinguish three different methods, and to mark, with sufficient precision, the periods at which the one may be considered to have ceased to predominate, and the other to have become the leading and preponderating system. It is hoped, that it will not be considered uninteresting to the American student to trace somewhat in detail these different systems. We shall endeavor, as succinctly as the nature of the subject will admit, to give a general outline of these systems, and then specify more at length their peculiarities. For this purpose we shall borrow largely from Prof. Ortolan.

(*To be concluded in our next.*)

Art. IX.—ILLINOIS.

ITS CONQUEST DURING THE AMERICAN REVOLUTION, BY THE ARMS OF VIRGINIA, UNDER COL. GEORGE ROGERS CLARKE.

In a note accompanying the present article we are promised one upon the "Resources, Internal Improvements, &c., of Virginia." We trust that this paper will not be delayed, since its publication would be of essential service throughout the Union—so interested are we all in the OLD DOMINION. On the strength of the promise, we announce the article as in preparation.—EDITOR.

THERE are, in the history of Virginia, a series of exploits, perhaps not generally known, and yet too brilliant ever to be forgotten. They are fraught with interest, for in them we have all the boldness and adventure of distant conquest, without the bloodiness of battle; and all the fruits of victory, without the horrors of war. And perhaps their most engaging, as it is their most remarkable feature, is, that though undertaken to repel and avenge the most relentless depredations and massacres, they were performed in a manner that is an honor to humanity.

It may be deemed somewhat hardy to attempt to draw off attention from the grander and more exciting themes of history, to the achievements of a single State; to forsake the highways of military glory, beaten by the Alexanders, Hannibals, Cæsars, Napoleons, and Wellingtons, of other times and other countries, for the by-paths of the West, first trod by the gallant Clarke and his followers. But at the time of which I shall write, neither the "old Dominion" nor her sisters had become overshadowed by the Federal Government; and the deeds to which I propose to direct attention, had an important bearing upon the results of the great central epoch in our national history—the war of our independence. However strong, then, that spirit of centralization, which ever merges the circumscribed and unpretending in the grand and the comprehensive—the affairs of the State in those of the Union—let us now resist its influence and turn our attention to the conquest of Illinois, by George Rogers Clarke, who, as Professor Tucker says, "was endowed with every military virtue and talent."

The region of country formerly called Illinois, embraced a territory which is now covered by several States. It belonged to, or was claimed as a part of, both Florida and Louisiana, and was divided into West Illinois and East Illinois by the Mississippi river. The name of Florida was once applied to the country along the Atlantic coast, extending from the present State of that name even north of Virginia; and this region, especially the southern part, was represented by the early discoverers as a perfect paradise, possessing not only every beauty and bounty of nature, but also springs of immortal youth. In the rear of this terrestrial paradise was a vast, unexplored interior, with its virgin forests, flowing streams, and fertile soil, scarcely less lovely and inviting. As discovery progressed, French and Spaniards pushed forward their explorations, chiefly along the almost endless rivers of the West, and extended the names of Florida and Louisiana almost to the farthest limits of the continent. Involved in the fate of these, Illinois passed under many masters, both kings and subjects, until in 1763 it was ceded by France to Great Britain, at the close of the French and Indian war.

Just about the time that George Washington left his chain and compass to bear Governor Dinwiddie's letter to the French commandant on the Ohio, there was born one who was destined to be trained in the same occupation, for the service of his country—George Rogers Clarke, who was born in the county of Albemarle, Va., in September, 1753. Of his early years little is known. He had but an ordinary education, but was quite a proficient in geography and mathematics. He adopted the employment of a surveyor, and thus acquired those tastes and habits of observation, and that love of adventure, which are so necessary for a pioneer and a frontier warrior.

He engaged warmly in Gov. Dunmore's war with the Indians, and after the hasty and perhaps corrupt conclusion of peace, was offered a commission in the royal service, which he refused. Kentucky, then containing few settlers, but full of adventure, and inviting to emigrants, attracted his daring spirit, and he went thither in 1775. Having visited his native State, he returned to Kentucky in 1776.

Of this return, there is the following anecdote, from Gen. Ray: "I had come down," said the general, "to where I now live (about four miles north of Harrodsburg), "to turn some horses out in the range. I had killed a small blue-winged duck, that was feeding in my spring, and had roasted it nicely on the brow of the hill, about twenty steps east of my house. After having taken it off to cool, I was much surprised on being suddenly accosted by a fine, soldierly-looking man, who exclaimed: 'How do you do, my little fellow? Ain't you afraid of being in the woods by yourself?' I invited the traveler to partake of my duck, which he did, without leaving me a bone to pick, his appetite was so keen; though he should have been welcome to all the game I could have killed, when I became acquainted with his noble and gallant soul." After satisfying his questions, young Ray inquired of the stranger his name and his business in this remote region. "My name is Clarke," he answered; "and I have come out to see what you brave fellows are doing in Kentucky, and to lend you a helping hand, if necessary." Ray, then a boy of sixteen, conducted Clarke to Harrodstown, where he spent his time in making those observations on the condition and prospects of the country natural to his comprehensive mind, and in assisting at every opportunity in its defense.*

He took a very prominent part both in its military and civil affairs, and is styled by the historian, "the earliest founder of the commonwealth."

The Revolution was now in full progress, and war was waged against us, not as fellow-Englishmen, or even fellow-beings, but as *rebels*, to whom no quarter was due. When the abilities of so-called civilization are thus misdirected, they become the most frightful means of inhumanity and destruction. It required some of the ingenuity of enlightened minds to devise such modes of warfare as were employed, inciting slaves and savages against us. The mere existence of the war was sufficient to impel the Indians to deeds of barbarity. Hitherto, and very recently, they had seen the country supplied with troops from abroad, and Americans and English battling in each other's behalf, and themselves kept in awe by the threatened and experienced power of England. But now, this union was severed, and they who lately fought side by side, were now arrayed in deadly hostility. How natural for them to infer the worst against the colonists, from this reversed attitude of their former friends; and for every cause of discontent and every feeling of revenge to receive new strength! But when to this is added the fact, that they were influenced even by falsehood and misrepresentation, and stimulated by bribes, we can conceive to what a pitch their resentment and enmity were wrought up. Murder, rapine, and fire ravaged the whole frontier.

In these days of quiet, in our own polished and happy homes, we can hardly appreciate the dangers and privations of those times. But if we will recall to our imaginations the flourishing state of Cherry Valley, in New York, with its river, and "fair Wyoming,"

* Butler's Kentucky, p. 37, *note*. The other works referred to in the preparation of this paper are—Wirt's Life of Patrick Henry; Tucker's Life of Jefferson; Marshall and Sparks' Life of Washington; Girardin's Continuation of Burke's History of Virginia; National Portrait Gallery—George Rogers Clarke; Brown's History of Illinois, &c. But I am chiefly indebted to Butler, who was quite closely followed by Brown.

"Once the loveliest land of all,
That see the Atlantic wave their morn restore,"

with its frightful desolation by those monsters, Butler and Brandt, we will better understand to what enormities the ruthless savages were incited. At the time of Clarke's expedition, these horrid scenes had not been enacted; but those in the West sprung from the same sources, and were fraught with the same appalling consequences.

Kentucky suffered especially. Her infant settlements, suddenly devastated, were sometimes deserted by the fortunate survivors. Men at work were shot down by the lurking savage, and bodies of them waylaid and exterminated.

Many instances of romantic adventure and noble daring occurred, but we can only mention the following: Young Ray was remarkable for his swiftness of foot, by which means he once escaped a body of savages, who caught and killed his brother; and, making his way to the fort, was enabled to give them timely warning, and prepare them for the expected attack. He also proved exceedingly useful in furnishing provisions, which he procured at great risk of his life. One day, he was with one McConnel, who was trying his gun at a mark, near the fort. McConnel was suddenly shot dead. Ray, following the direction of the shot, perceived the enemy; but, while attempting to avenge his friend's death, he was attacked by a body of Indians who had crept up unseen. He retreated with his usual speed, but for one hundred and fifty yards was exposed to a constant fire. When he reached the fort, they dare not open the gates to him. With singular presence of mind, he threw himself flat on the ground, behind a stump, right under the walls of the fort. The bullets flew thick around him, and even threw the dirt upon his body. His mother witnessed his danger, but could not relieve him. At length, the happy thought struck him, and Ray called out, "For God's sake, dig a hole under the wall, and take me in!" This strange expedient was adopted, and he was taken safely in, though he had been exposed for four hours to the fire of the enemy.*

Clarke now formed the bold design of checking the merciless ravagers, and of erecting a barrier against them, by capturing the British posts in Illinois, which he justly regarded as the sources of most of the expeditions against Kentucky. He also saw the great advantage to Virginia, of extending her dominion and removing farther from her borders the theatre of Indian barbarities.

Accordingly, in 1777, he sent two spies to Illinois, to ascertain the disposition of the inhabitants and reconnoiter the posts of the enemy. Without knowing Clarke's object, they confirmed all his suspicions as to the instigation of the Indians, and brought encouraging intelligence of the friendly feelings of many of the inhabitants toward the Americans. His resolution was immediately taken, and in October, 1777, he started to Virginia, to lay before the Governor his plan of a campaign against Illinois.

The war of the Revolution had been waging with various success. Burgoyne had been captured; but the joy at this happy event could not dispel the uncertainty which hung over the contest. And even this brilliant success produced disaffection, and led partly to a con-

* Butler's Kentucky, p. 43.

'spiracy for supplanting the "Father of his Country," and putting in his stead the victorious Gates. The situation of the colonies would seem to have demanded all the resources of the State; but fortunately for Clarke, he had to deal with a man of rare comprehensiveness and capacity; and he found his plans warmly espoused by Patrick Henry, the first Republican Governor of Virginia. This great patriot might himself have proved no ordinary soldier; he never had much opportunity of fully displaying his military genius; but was once about to enter upon a military career, and we concur with Mr. Wirt, that there was good reason for anticipating eminent success. His humanity now, no doubt, prompted him to rescue the bleeding frontier, while he could well appreciate the political and military advantages of the proposed expedition. After several consultations, from the 10th of December, '77, the Governor and Council gave Clarke authority to raise seven companies of fifty men each, in any county of the State, with £1,200 in money, and an order on the officer at Fort Pitt, now Pittsburg, for ammunition, boats, and other necessary equipments. As the scheme depended upon secrecy, the Governor consulted only a few prominent individuals; and George Wythe, George Mason and Thomas Jefferson, promised, in case of success, to exert their influence to procure a grant of 300 acres of land to each man who should join the standard of Clarke. Two sets of instructions were given him; one open, directing him to proceed to the defense of Kentucky, which appearing to many to be a useless dispersion of force, threw impediments in his way of raising men—the other secret, directing him to strike a blow at Kaskaskia. These instructions, given under such great provocation, and to redress such grievous injuries, reflect immortal honor upon Governor Henry and the State. Though Clarke was going against such implacable foes, Governor Henry rises above all sordid and revengeful feelings, and says, "It is earnestly desired that you show humanity to such British subjects and other persons, as fall in your hands. If the white inhabitants, &c., give undoubted evidence of their attachment to the State * * * let them be treated as fellow-citizens, and their persons and property duly secured. Assistance and protection against all enemies whatever shall be afforded them; and the Commonwealth of Virginia is pledged to accomplish it. But, if these people will not accede to these reasonable demands, they must feel the miseries of war, under the direction of that humanity that has hitherto distinguished Americans; and which, it is expected, you will ever consider the rule of your conduct, and from which you are in no instance to depart."* These injunctions were in exact consonance with Clarke's own feelings, and were gladly obeyed.

After overcoming many obstacles, and resisting attempts to divert him from his plans, as he descended the Ohio river, he succeeded in reaching the falls of the Ohio, where he fortified Corn island, opposite to Louisville. Here he first announced the true destination of his expedition, and it was received with acclamation, by all but Capt. Dillard's company. The greater part of these, with a lieutenant whose name is generously spared, basely deserted him at night thereby still farther reducing his force, already too small, from disap-

* Brown's Illinois, p. 239, *note*.

pointments and the inexpediency of drawing too many from the defense of Kentucky. For its defense, a part of those with him were to return home, and a day of rejoicing was spent between them and their comrades destined for the reduction of Kaskaskia.

On the 24th of March, 1778, all was ready, and the gallant band moved down the Ohio. Intending to march by land to Kaskaskia, from the nearest point on the Ohio, they were equipped in the lightest possible manner. Clarke longed to strike a blow at the more important point of St. Vincents, now Vincennes; but his small force, consisting of only four companies, under Montgomery, Bowman, Helm and Harrod, and the nearness of Kaskaskia to the Spanish settlements west of the Mississippi, to which he purposed to retreat in case of defeat, and the hope of securing the influence of the French, who have always been most successful in gaining the confidence and affections of the Indians, and, we may add, the instructions given him, all induced him to forego this chosen object for the present. After leaving Fort Pitt, the commandant there had sent him the gratifying intelligence of the alliance of the French; and this important fact proved of great service during the expedition.

Near the mouth of the Tennessee river, they stopped a party of hunters, recently from Kaskaskia, from whom they gained useful information. M. Rocheblave was then in command there. The militia were kept in good order and on the look-out for the Virginians; the fort, though without a regular garrison, afforded a safe retreat, and if any attack were anticipated, the assailants would meet a warm reception. A surprise was, therefore, all important. Having enlisted these hunters, they proceeded down the river to Fort Massac (contracted from Fort Massacre), whence they took up the line of march, in a north-western direction, through a comparative wilderness, toward Kaskaskia. They endured many hardships, and were badly provided with food and water. On the third day, their guide, John Saunders, lost his way, and being suspected of treachery, as he had frequently traveled the route, was threatened with certain death, if he did not extricate them from their critical situation. Far in a hostile country, in momentary expectation of being betrayed into the hands of an enemy, with whose tender mercies they were but too well acquainted, their alarm may easily be imagined. But fortunately, after making a thorough examination, with a guard over him, Saunders recognized a familiar object, established his innocence, and every heart was again bounding with hope. The pleasant reaction of their minds must have borne them on for many miles.

On the evening of the memorable 4th of July, 1778, they came within a few miles of the town, where they lay till dark, when the march was resumed. They learned from a prisoner taken, that the militia had been under arms a few days previous; but no cause of alarm appearing had been disbanded, and all was now in unsuspecting security. Boats were provided for the transportation of the troops; two divisions were to repair to different parts of the town, while Clarke with a third was to take possession of the fort on this side of the river. If he succeeded, the other two divisions were to occupy certain parts of the town, and to send runners through the streets giving warning in the French language, that "all who appeared

would be shot down." Entering the fort through a postern, which was shown him by the prisoner they had taken, Clarke possessed it without resistance. The town of about two hundred and fifty houses was surrounded, every means of intelligence cut off and the inhabitants disarmed, without shedding one drop of blood! What a glorious retaliation! A victory the more precious, as it was bloodless!

Clarke was well apprised of the dread in which the Virginians were held, on account of the misrepresentations of the English emissaries, and he resolved to make it subserve his purposes. During the night the men patrolled through the town, whooping and yelling in the most approved Indian fashion; and the inhabitants were filled with the greatest terror. M. Rocheblave was taken in his chamber, but very few of his papers captured. It was suspected that they were concealed in the trunks of his wife, which, however, were gallantly permitted to escape examination; whereupon the historian breaks forth: "Better, ten thousand times better it were so, than that the ancient fame of the sons of Virginia should be tarnished by—insult to a female!"

On the next day the troops were withdrawn to the vicinity of the town, but no communication was allowed with the soldiers, nor with the citizens who had been sent for and examined. When the citizens were found conversing with each other, several of the militia officers were suddenly seized and put in irons. Everything was designed to cause the greatest consternation. At length M. Gibault, the priest, and several gentlemen, obtained permission to wait on Col. Clarke. When they entered, their ideas of refinement and rank were shocked at the unseemly appearance of their conquerors. It was some moments before they could speak, and then they had to inquire which was the commander, so completely had all apparent distinctions been annihilated. The priest asked permission for the people to assemble in their church, to take leave of their friends, probably for the last time. This was readily granted, contrary to their expectations, with the assurance that instead of being enemies to their religion, the Americans left every man's religion to himself and his God. When they attempted to hold farther parley, they were abruptly dismissed. The whole population assembled in church with fear and trembling, and the soldiers were studiously kept from molesting their houses and property. Another deputation then came to return thanks for the indulgence that had been granted them; to sue for mercy to their wives and children, and to protest that they were instigated by others, and not by hostility to the Americans, of the grounds of whose quarrel with the English they had not much knowledge. The time had now arrived for the exhibition of the contrast, which Col. Clarke had all along intended to produce, and he thus addressed them:

"Do you mistake us for savages? I am almost certain you do from your language. * * * * My countrymen disdain to make war upon helpless innocence; it was to prevent the horrors of Indian butchery upon our wives and children, that we have taken up arms and penetrated to this remote stronghold of British and Indian barbarity. * * Now that the King of France," said he, "had united his powerful arms with those of America, the war would not continue long; but the inhabitants of Kaskaskia were at liberty to take which

side they pleased. * * * * I am convinced that you have been misinformed and prejudiced against us by British officers, and your friends who are in confinement shall be immediately released."*

The whole town was now filled with rejoicing; and, as Clarke foresaw, their joy and gratitude were just in proportion to their previous apprehension and dismay. The bells were set to ringing, the crowded church resounded with thanksgivings, and the dominion of Clarke was established in the hearts of the people. Major Bowman, with his company mounted, and several volunteers from Kaskaskia, was next dispatched to take possession, in the name of Virginia, of Cahokia, a town sixty miles higher up the Mississippi. On the 6th of July, he took it by surprise. The terror at first inspired by the presence of the much-dreaded Virginians, was soon converted, by the glowing accounts of the gentlemen from Kaskaskia, into shouts "for freedom and the Americans."

At the capture of Kaskaskia, one of the principal citizens, M. Cerre, said to be inimical to the Americans, was absent at St. Louis, on his way from Quebec. Clarke resolved to gain him over if possible. He therefore placed a guard over his family and a large store of goods belonging to him. M. Cerre, wishing to return to his family, applied to Clarke for a safe conduct, which, though urged by the strongest recommendation from the Governor of St. Louis and others, he refused, saying, that if M. Cerre was innocent of inciting the Indians against the Americans, he need have no fears. Shortly after, Cerre presented himself and repelled the grave charges that had been made against him, and demanded to be confronted by his accusers, alleging that some who owed him debts might wish to ruin him, in order to get rid of their obligations. When brought before him, his accusers had no evidence against him. Clarke heartily congratulated him upon his acquittal, and told him that if he did not wish to become an American citizen, he might dispose of his property and remove unmolested. But Cerre was so captivated by such humane and generous conduct, that he took the oath of allegiance, and proved a steady and valuable friend to the American cause.

(*To be concluded in our next.*)

Art. X.—PRODUCTION AND MANUFACTURE OF WOOL.

No. I.

It is our intention to present a series of papers upon this important subject, the material for which we are now engaged in collecting. We solicit in our aid information from those engaged in these branches of industry in different sections of the Union, north, south, and west. The great subject of sheep, in which our government has manifested so much interest, as shown in the mission of Mr. Fleishman to Europe, and the work which that gentleman informs us he has now in preparation for press, will have an important place. We have facts before us to show the advantages which the Southern States possess

* Butler's Kentucky, pp. 56-7.

in this particular, which in due course will be presented. In this case, as in others, some space may intervene between our papers, necessary in the prosecution of researches.

The elaborate statistics of Massachusetts, collected in 1845, and politely furnished us by Hon. Abbot Lawrence, show—

TABLE OF MASSACHUSETTS WOOL MANUFACTURE.

Woolen Mills	178	Value of Jeans	$ 449,685
Sets Woolen Machinery	514	" of Flannel	1,284,967
Wool consumed ....lbs.	15,387,448	" of Woolen Yarn	99,689
Value of Broadcloth	$2,157,392	" of Woolens generally	561,600
Yards of Cassimer	2,451,458	Capital invested	5,604,002
Value of "	$2,416,818	Males employed	3,901
Yards Satinet	3,558,720	Females "	3,471
Value of "	$1,907,327		

OTHER MANUFACTURES OF WOOL.

Consumed for carpeting,* lbs.	1,786,238	Value of Worsted Goods	$382,858
Value of Carpeting	$834,322	Quantity of Wool....lbs.	617,366
Capital invested	488,000	Value of Worsted Yarn	$271,708
Persons employed	1,034	Capital invested	514,000
		Persons employed	846

The statistics of the other States will be found in the census of 1840, since which we know of no general returns.

The object of our present paper will be principally to note the origin and progress of the woolen manufacture among the ancients; reserving its modern discussion to other numbers. We rely mainly upon the authority of a valuable work published by Harper & Brothers last year, which we commended in our last number, and which should have a large circulation.†

The sheep is supposed not to be a native of Europe. In Asia, from the earliest periods, the pastoral life was the main stay of industry. The ancient Scythians tended their herds and flocks. The Persians had abundance of these. The Bible affords us innumerable evidences of the extensive flocks of the Mesopotamians, Syrians, Tyrians, etc. In the war against the Hagarites the Hebrews took 250,000 sheep, and Moses took 675,000 from the Midianites. Similar remarks may be applied to Arabia. Sheep were bred in Egypt, but to a limited extent. "Egyptian wool cannot have been of the least importance as an article of commerce. What was produced must also have been consumed in the country. For, although the chief material for the clothing of the Egyptians was linen, and they were forbidden to be buried in woolen or to use it in the temples, yet Herodotus (ii. 81) states, that on ordinary occasions they wore a garment of white wool over their linen shirt. They also used wool for embroidering. According to Pliny the Egyptian wool was coarse and of a short staple. Tertullian records a saying of the Egyptians, that Mercury invented the spinning of wool in their country." The Ethiopian sheep were small and hairy like goats, so that their skins were used for clothing. The Lybians were entitled, "abounding in flocks"—πουμηλος. The Coraxi, near the Euxine, paid great attention to this industry, and sent their fine wool carpets and shawls

* 150,000 lbs. of cotton only employed in this manufacture.

† Domestic Life and Manufactures of the Ancients, or History of Silk, Cotton, Wool, &c.

to the markets of the Ægean sea. The Circassians of the same neighborhood, at this day, produce beautiful flocks. There is now a nation of the Coraxi whose dress "is made of woolen cloth, and which is admired throughout the whole of Caucasus."

In the classical writers the wool of Miletus is everywhere celebrated for its fineness, and Tertullian declares, "From the beginning the Milesians were employed in shearing sheep, the Seres in spinning the produce of trees, the Tyrians in dyeing, the Phrygians in embroidering, and the Babylonians in weaving." Thrace is called, by Homer, "the mother of flocks." Sheep are supposed to have constituted much of the wealth of Bœotia; Laberius sung of Attic wool:

> "No matter whether in soft Attic wool,
> Or in rough goats' hair you be clothed," &c.

The Arcadians were celebrated for their love of music and their pure pastoral life. "In Macedonia also the king, though living in a state of so little refinement that his queen *baked the bread for the whole household*, was possessed at an early period of flocks of sheep and goats, together with horses and herds of oxen, which were entrusted to the care of separate officers. We are informed that three Argive brothers, having taken refuge in the upper part of Macedonia bordering upon Illyria, became hired servants to the king, one of them having the custody of the horses, another of the oxen, and a third of the sheep and goats." The Sicilian pastoral life has been sung by Theocritus. "Pliny informs us, that in his time the wool of Apulia was in the highest repute; that throughout the South of Italy the best sheep were bred in the vicinity of Tarentum and Canusium; and that the wool of Tarentum was admired for its tinge of black, and that of Canusium for its fine brown or yellow color. The directions for the management of sheep, given by Varro, Columella, Virgil, and other writers on rural affairs, all tend to show the pains taken by the Romans to improve the breed of sheep, and especially to produce wool of the finest quality." The poet Martial thus handsomely acknowledges the receipt of a rich toga from Parthenius:

> "Say, grateful gift of mine ingenious friend,
> What happy flock shall to thy fleece pretend?
> For thee did herb of famed Phalantus blow,
> Where clear Galesus bids his waters flow?
> Did thy wool count the streamlets, more than seven,
> Of him who slaked the warrior horse of heaven?
> Or did Tartessian Guadalquiver lave
> Thy matchless woof in his Hesperian wave?
> Thou didst not need to taste Amyclæ's bane,
> And wouldst have tried Milesian art in vain.
> With thee the lily and the privet pale
> Compared, and Tibur's whitest ivory fail.
> The Spartan swan, the Paphian doves deplore
> Their hue, and pearls on Erythrean shore.
> But, though the boon leave new-fall'n snows behind,
> It is not purer than the donor's mind.
> I would prefer no *Babylonian vest*,
> *Superbly broider'd* at a queen's behest;
> Nor better pleased should I my limbs behold,
> Phryxus, in *webs* of thine Æolian gold.
> But O! what laughter will the contrast crown,
> My worn lacerna on th' imperial gown!"

The ancient Germans produced but a coarse wool; the same is true of Gaul, which made Juvenal say,

> "Some coarse brown cloaks perhaps I chance to get,
> Of Gallic fabric, as a fence from wet."

The early Britains, according to Cæsar, had abundance of cattle, as every schoolboy will remember, *pecoris magnus numerus*. We introduce a passage in relation to Spain:

"Of all the countries in Europe, says Mr. Low, Spain has been the longest distinguished for the excellence of its wool. This fine country, more varied in its surface and natural productions than any other region of the like extent in Europe, produces a great variety of breeds of sheep, from the larger animals of the richer plains, to the smaller races of the higher mountains and arid country. Besides the difference produced in the sheep of Spain by varieties of climate and natural productions, the diversity of character in the animals may be supposed to have been increased by the different races introduced into it:—first, from Asia, by the early Phœnician colonies; secondly, from Africa by the Carthaginians, during their brief possession; thirdly, from Italy by the Romans, during their dominion of six hundred years; and fourthly, again from Africa by the Moors, who maintained a footing in the country for nearly eight centuries. The large sheep of the plains have long wool, often colored brown or black. The sheep of the mountains, downs, and arid plains have short wool, of different degrees of fineness, and different colors. The most important of these latter breeds is the merino, now the most esteemed and widely diffused of all the fine-wooled breeds of Europe."

Prescott, in his late important work upon Peru,* informs us that the ancient inhabitants, from the llama and the kindred species of Peruvian sheep, obtained a fleece adapted to the colder climate of the table lands, more estimable than the down of the Canadian beaver, etc. He thus describes the LLAMA:

"Of the four varieties of the Peruvian sheep, the llama, the one most familiarly known, is the least valuable on account of its wool. It is chiefly employed as a beast of burden, for which, although it is somewhat larger than any of the other varieties, its diminutive size and strength would seem to disqualify it. It carries a load of little more than a hundred pounds, and cannot travel above three or four leagues in a day. But all this is compensated by the little care and cost required for its management and its maintenance. It picks up an easy subsistence from the moss and stunted herbage that grow scantily along the withered sides and the steeps of the Cordilleras. The structure of its stomach, like that of the camel, is such as to enable it to dispense with any supply of water for weeks, nay, months together. Its spongy hoof, armed with a claw or pointed talon, to enable it to take secure hold on the ice, never requires to be shod; and the load laid upon its back rests securely in its bed of wool, without the aid of girth or saddle. The llamas move in troops of five hundred or even a thousand, and thus, though each individual carries but little, the aggregate is considerable. The whole caravan

* History of the Conquest of Peru, with a Preliminary View of the Civilization of the Incas. New York. Harper & Brothers. 1847. 2 vols.

travels on at its regular pace, passing the night in the open air, without suffering from the coldest temperature, and marching in perfect order and in obedience to the voice of the driver. It is only when overloaded that the spirited little animal refuses to stir, and neither blows nor caresses can induce him to rise from the ground. He is as sturdy in asserting his rights on this occasion, as he is usually docile and unresisting."

OTHER PERUVIAN SHEEP.

"But the richest store of wool was obtained, not from these domesticated animals, but from the two other species, the *huanacos* and the *vicunas*, which roamed in native freedom over the frozen ranges of the Cordilleras; where not unfrequently they might be seen scaling the snow-covered peaks which no living thing inhabits, save the condor, the huge bird of the Andes, whose broad pinions bear him up in the atmosphere to the height of more than twenty thousand feet above the level of the sea. In these rugged pastures, 'the flock without a fold' find sufficient sustenance in the *ychu*, a species of grass which is found scattered all along the great ridge of the Cordilleras, from the equator to the southern limits of Patagonia. And as these limits define the territory traversed by the Peruvian sheep, which rarely, if ever, venture north of the line, it seems not improbable that this mysterious little plant is so important to their existence, that the absence of it is the principal reason why they have not penetrated to the northern latitudes of Quito and New Grenada."

PERUVIAN WOOL MANUFACTURES.

"But nearly the whole of the sheep, amounting usually to thirty or forty thousand, or even a larger number, after being carefully sheared, were suffered to escape and regain their solitary haunts among the mountains. The wool thus collected was deposited in the royal magazines, whence, in due time, it was dealt out to the people. The coarser quality was worked up into garments for their own use, and the finer for the Inca; for none but an Inca noble could wear the fine fabric of the vicuna.

"The Peruvians showed great skill in the manufacture of different articles for the royal household from this delicate material, which, under the name of *vigonia* wool, is now familiar to the looms of Europe. It was wrought into shawls, robes, and other articles of dress for the monarch, and into carpets, coverlets, and hangings for the imperial palaces and the temples. The cloth was finished on both sides alike; the delicacy of the texture was such as to give it the lustre of silk; and the brilliancy of the dyes excited the admiration and the envy of the European artisan. The Peruvians produced also an article of great strength and durability by mixing the hair of animals with wool; and they were expert in the beautiful feather-work, which they held of less account than the Mexicans from the superior quality of the materials for other fabrics, which they had at their command."

"A similar arrangement prevailed with respect to the different manufactures as to the agricultural products of the country. The flocks of llamas, or Peruvian sheep, were appropriated exclusively to

the Sun and to the Inca. Their number was immense. They were scattered over the different provinces, chiefly in the colder regions of the country, where they were intrusted to the care of experienced shepherds, who conducted them to different pastures according to the change of season. A large number was every year sent to the capital for the consumption of the court, and for the religious festival and sacrifices. But these were only the males, as no female was allowed to be killed. The regulations for the care and breeding of these flocks were prescribed with the greatest minuteness, and with a sagacity which excited the admiration of the Spaniards, who were familiar with the management of the great migratory flocks of merinos in their own country.

"At the appointed season, they were all sheared, and the wool was deposited in the public magazines. It was then dealt out to each family in such quantities as sufficed for its wants, and was consigned to the female part of the household, who were well instructed in the business of spinning and weaving. When this labor was accomplished, and the family was provided with a coarse but warm covering, suited to the cold climate of the mountains—for, in the lower country, cotton, furnished in like manner by the crown, took the place, to a certain extent, of wool—the people were required to labor for the Inca. The quantity of the cloth needed, as well as the peculiar kind and quality of the fabric, was first determined at Cuzco. The work was then apportioned among the different provinces. Officers, appointed for the purpose, superintended the distribution of the wool, so that the manufacture of the different articles should be intrusted to the most competent hands. They did not leave the matter here, but entered the dwellings, from time to time, and saw that the work was faithfully executed. This domestic inquisition was not confined to the labors for the Inca. It included, also, those for the several families; and care was taken that each household should employ the materials furnished for its own use in the manner that was intended, so that no one should be unprovided with necessary apparel. In this domestic labor all the female part of the establishment was expected to join. Occupation was found for all, from the child five years old to the aged matron not too infirm to hold a distaff. No one, at least none but the decrepit and sick, was allowed to eat the bread of idleness in Peru. Idleness was a crime in the eye of the law, and, as such, severely punished; while industry was publicly commended and stimulated by rewards."

We conclude with a description of a woolen mill and the woolen manufacture, from Mr. Miles' "History of Lowell," 1846.

A LOWELL WOOLEN MILL.

But one establishment in this city is appropriated to the manufacture of woolen cloth. This is the Middlesex company. Their wool comes from the States of Vermont, New Hampshire, New York, Ohio, Pennsylvania, Illinois, Missouri, and some, recently, from the Territory of Wisconsin. The quantity which is here annually manufactured equals the produce of four hundred thousand sheep. Received into the company's store-room, it is first assorted into eleven different kinds, according to degrees of fineness. The wool is then dyed; after which it passes through the picker. From the picker it is taken successively to the carding, spinning, dressing, and weaving rooms. The cloth is then "burled," as it is called, by which is meant a careful removal of all imperfect threads; and the

next processes are those of scouring and fulling. At this stage of the manufacture, the cloth is applied to the "gig," or napping machine, by which the nap is raised; after which it is shorn, passing through the shearing machine from ten to sixteen times. The fine gloss of the cloth is then put upon it by steam, and after another careful examination by the "linters," it is marked, pressed, measured, done up in papers, boxed and sent to Boston.

The large mill of this company is seven stories high, one hundred and fifty-eight feet long, and forty-six feet wide. Another, of nearly the same size is soon to be erected. The quantity of broad-cloth and cassimers annually made, is about one hundred and fourteen thousand yards of the former, and six hundred and twenty thousand yards of the latter. Some of the yearly expenses attending this are as follows: logwood, six thousand dollars; indigo, twenty-two thousand dollars; glue, five thousand dollars; soap, eight thousand dollars; packing boxes, one thousand six hundred dollars; wrapping paper, one thousand dollars. Sales of cloth have amounted to eight hundred thousand dollars per year. The whole importation of cassimers from England to the United States, in 1844, was seven thousand pieces; while this company alone manufactured, in that year, more than twenty thousand pieces.

Art. XI.—OPERATIONS OF THE AMERICAN GOVERNMENT SINCE 1789.

TREASURY DEPARTMENT IN REGISTER'S OFFICE,
WASHINGTON CITY, *September* 7, 1847.

J. D. B. DE BOW, ESQ.—The value of your Commercial Review to our merchants is universally conceded, and if the article herewith transmitted should enhance the interest of its columns, I shall be highly gratified.

You have no doubt seen by the journals of the day, that there are now in the office of the Register of the Treasury, Hon. Daniel Graham, three most important compilations, exhibiting the entire fiscal operations of the government from 1789 to the present period. The first volume embraces the expenditures, civil, miscellaneous, diplomatic, military, naval, and public debt.

Some idea may be formed of the magnitude of this work when we find that there are more than two thousand captions under which the items have to be classified.

I inclose an abstract containing a few topics of local interest to your readers of the Crescent City.

EXPENDITURES ON THE NEW ORLEANS CUSTOM-HOUSE EDIFICE.

In 1807–8–9	$19 200 00
In 1820	80,081 33
In 1840	5,500 00
	$104,781 33

MINT AT NEW ORLEANS.

Buildings, machinery, contingent expenses, and machinist, &c.	$507,463 55
Officers and clerks	118,860 51
Laborers	152,306 72
	$778,630 78

MARINE HOSPITAL AT MCDONOUGH.

Expenditures thereon	$88,121 07

I append to these topics of local interest, a statement of the mileage allowed to members of Congress, at different periods, and in the aggregate:

First Congress, ending 3d March,	1790	$325,202 97
Fifteenth " " "	1819	626,242 50
Twenty-ninth do. " "	1847	1,309,437 00

Aggregate mileage of members of Congress from the First to the Twenty-ninth Sessions, both inclusive, $19,100,445 48.

The second volume embraces the receipts and expenditures on account of public lands, under which head are comprehended the purchases of Florida and Louisiana. The condition of every land office in the country is therein annually set forth, and from the accompanying table it will be seen that the opinion generally current as to our public land system, is very erroneous. The net profits exceed $39,000,000, as shown by the following table:

LAND OFFICE, NEW ORLEANS.

	Receipts.	Expenditures.	Net Receipts.	Rate per cent. of exp. on amt. of receipts.	Excess of exp. over receipts.
1821	$ 48,200 00	$733 46	$47,466 54	1.52	....
1822	100,132 03	1,904 67	98,227 36	1.90	....
1823	432 25	1,783 93	....	412.94	$1,351 68
1824	....	1,000 00	....	..	1,000 00
1825	500 00	831 31	....	166.26	331 31
1826	746 37	1,514 92	....	203.07	768 55
1827	134,451 00	4,316 93	130,134 07	3.21	....
1828	....	2,931 79	....	..	2,931 79
1829	400 00	1,008 00	....	252.	608 00
1830	9,101 37	1,823 09	7,278 28	20.03	....
1831	13,910 00	2,519 73	11,390 27	18.11	....
1832	1,552 75	1,076 58	476 17	69.36	....

RECEIPTS AND EXPENDITURES OF PUBLIC LANDS, FROM MARCH 4, 1789, TO JUNE 30, 1845.

Receipts.

Receipts during said period		$127,144,320 67

Expenditures.

Pertaining to General Land Office	$1,877,574 24	
" to Surveys	3,941,121 28	
On account of private land claims	422,932 64	
For sundry purposes pertaining to lands	1,273,726 40	
For surveyors general, repayments and patents	1,174,133 58	
Miscellaneous	51,690 34	
Relating to treaties for Indian lands	44,599,902 15	
Under the Convention with France of the 30th April, 1803, &c., for Louisiana	15,000,000 00	
For interest on stock thereupon issued	8,529,353 43	
Under treaty with Spain of 20th February, 1819, for the Floridas	5,000,000 00	
For interest of stock thereupon issued	1,489,768 66	
Amount of 3 and 5 per cents., estimated upon the proceeds of public lands within their borders, and paid to the States for aiding them in internal improvements, in consideration of the U. S. not having paid taxes on the public lands, &c.	3,361,847 63	
Amount of proceeds of public lands, paid to the several States and Territories, under the Act 4th September, 1841	543,858 79	87,265,909 14
Net proceeds		$39,878,411 53

The third volume embraces the receipts and expenditures of the Custom-houses, and exhibits their entire operation singly and collectively.

As illustrations, I transmit two statements—one exhibiting the operations of the New Orleans Custom-house, in three different periods, viz.: the first year, the last year, and for the entire period of its existence up to the close of the fiscal year 1845–6.

OPERATIONS OF THE N. O. CUSTOM-HOUSE DURING THE YEAR 1801.

Receipts.

Duties on merchandise	$15,293 87	
" on tonnage	98 26	—15,392 13

Disbursements.

Total expenses of collection		839 77
Net revenue		$14,552 36

OPERATIONS N. O. CUSTOM-HOUSE FROM JULY 1, 1845, TO JUNE 30, 1846.

Receipts.

Duties on merchandise	$1,360,481 32	
" on tonnage	6,756 82	
Light money	4,890 94	
Fines, penalties and forfeitures	250 00	
Unclaimed merchandise	4,145 27	
Marine Hospital money	8,219 50	—1,384,743 85

Disbursements.

Debentures issued, and drawback on foreign merchandise exported	215,505 84	
Expenses attending prosecutions	2,451 48	
Duties refunded on all other merchandise	825 78	
Total expenses of collection	150,986 13	— 369,769 23
Net revenue		$1,014,974 62

OPERATIONS OF N. O. CUSTOM-HOUSE FROM 1801 TO JUNE 30, 1847, BOTH INCLUSIVE.

Receipts.

Duties on merchandise	$47,132,567 03	
" on Mediterranean fund	217,525 32	
" on tonnage	668,867 05	
Passports and clearances	20,416 00	
Light money	246,348 39	
Fines, penalties, and forfeitures	182,494 31	
Surplus of official emoluments	45,279 19	
Unclaimed merchandise	10,076 95	
Marine Hospital money	131,300 81	
Amount received from captors, being net proceeds of prize vessels and goods	3,495 37	—48,658,370 42

Disbursements.

Debentures issued, and drawbacks on foreign merchandise exported	11,688,664 81	
Drawback on Mediterranean fund	24,973 39	
" on domestic refined sugar exported	138,738 16	
Bounties on salted provisions and fish	944 55	
Expenses attending prosecutions	40,793 90	
Total tonnage and light money	35,213 86	
All other duties refunded	957,584 33	
Expenses of collection	2,802,887 94	—15,689,800 94
Net revenue		$32,968,569 48

The other statement comprehends the entire revenue system, and presents in detail all the operations of the Custom-houses of the Union, and exhibits the true net revenue derived from them.

Statement of the Receipts, Expenditures, Net Revenue, and excess of expenses of Collection of all the Custom-houses in the Union, from March 4, 1798, to June 30, 1846.

Receipts.			
Duties on merchandise	$1,120,326,705	08	
" on Mediterranean fund	8,703,530	30	
" on tonnage	7,121,531	92	
" on passports and clearances	457,023	70	
" on light money	1,222,348	93	
Fines, penalties, and forfeitures	1,949,323	19	
Unclaimed merchandise	153,979	81	
Interest received on treasury notes	90,346	01	
Custom charges on British vessels	1,932	95	
Sales of revenue cutters	10,444	17	
Debentures over issued	221	63	
Surplus of official emoluments	303,242	48	
Expenses on collection of the revenue, and allowances to vessels employed in the fisheries overpaid	937	49	
Marine hospital money	2,549,460	95	
Amount received from captors, being net proceeds of prize vessels and goods	218,822	14	
Amount for lands set off to the U. S. on account of bonds, &c.	5,101	42	1,143,114,952 17
Expenditures.			
Debenture issued, and drawback on foreign merchandise exported	193,105,577	56	
Drawback on Mediterranean fund	1,041,262	98	
" on domestic distilled spirits exp.	1,154,926	41	
" " " refined sugar export.	2,862,795	70	
" " " manuf. snuff exported	20,547	26	
Allowances to vessels employed in the fisheries	8,634,175	96	
Bounty on salt provisions and pickled fish	721,532	48	
Expenses attending prosecutions	644 558	43	
Interest paid on treasury notes	45,890	42	
Duties refunded on unclaimed merchandise, insolvencies, &c.	5,205	21	
Duties refunded on Mediterranean fund	46	08	
" " under the Act to remit duties on goods destroyed by fire in New York.	176,307	75	
Duties refunded on railroad iron	3,324,047	17	
" " on all other articles	10,219,864	30	
" " on total tonnage and light money	110,261	02	
Total expenses of collection	46,527,825	78	268,594,824 51
Net revenue			$874,520,127 66
Net revenue		$882,894,038	05
Deduct excess of expenses of collection		8,373,910	39
True amount of net revenue		$874,520,127	66

It is but justice to state that these important compilations were projected and commenced by the Hon. Ransom H. Gillett, during his administration as Register of the Treasury. He has since been transferred to the Bureau of the Solicitor of the Treasury, wherein he has already manifested his genius for order.

His successor to the Registry of the Treasury, the Hon. Daniel

Graham, is carrying out this great enterprise, and it will, it is expected, be published under the direction of the 30th Congress.

The Secretary of the Treasury, Hon. Robert J. Walker, warmly approves the measure, and has found the volumes of essential service in his investigations on the subject of the public revenue.

Heretofore much time was spent in ascertaining results which can, from these works, be ascertained in a few minutes; and calls of Congress requiring, formerly, weeks to answer, can be responded to in an hour.

Hoping that these statistics may be an acceptable contribution to your excellent periodical, I am yours truly,

SAMUEL YORKE AT LEE.

Art. XII.—SUGAR CULTURE AND MANUFACTURE OF LOUISIANA AND WEST INDIES.

In answer to a letter written by us, M. Valcour Aimé, an intelligent and enterprising planter of St. James, Louisiana, thus replies to our interrogatories. His experience and character as a sugar planter give great weight to his observations.—ED.

SIR—Although I do not suppose that the information I can give you, on the culture and manufacture of sugar, can add much to the value of the work you are preparing, I cheerfully proceed to answer your queries.

I do not know much more now about refining sugar than I did when I sent to the Agricultural Society the statement to which you allude; and I am even so much convinced that I have a good deal to learn on the subject, that I have sent to France in March last, a young man who had, under my tuition, become a pretty good boiler, to take farther lessons from a refiner living near St. Quentin. He has orders also to go to England, and to visit, before he returns, the refineries of our northern cities. This will cost me between $1500 and $2000. Whether it will be money profitably laid out time alone can show. I speak of this circumstance in order to show how much, in my opinion, the quality of the refined sugar depends on the manner in which it is boiled, and the quantity of bone-black used. The quantity, in the raw sugar employed, is of course to be taken into consideration; for with the same quantity of black, brown Havana, at 5½ cannot be expected to make as fine a loaf as the Havana which is sold at 7 cts.; but the Havana sugar of the latter quality makes rather too good an article for this market. I can sell a hundred pounds of sugar worth 9½ to 10 cts. against ten pounds at 11 to 12½ cts.

I repeat my statement to the Agricultural Society, that every planter, with sufficient means, who feels that he can give to the apparatus of Derosne or Rillieux the close attention which they require, will find it to his advantage to have one put up. His additional trouble and expenses will be fully compensated by the economy in fuel, in the quality of his sugar and the augmentation of the quantity produced, which can, I think, be fairly valued at almost 15 per cent. as far as I can judge from my own experience; I would, however, advise no

planter to refine the sugars obtained from these apparatus—any how, the first year. During my last crop, sugars boiled in my apparatus, drained in moulds without being liquored, and put up in hogsheads, when sufficiently dry, were sold at 7½ cts., exclusive of molasses; while the balance of the crop, when refined, averaged about 7½ cts., including the molasses. I am preparing for my ensuing crop a test for this experience, on a larger scale. I intend to boil about one-half of my crop into brown sugar, and to refine the balance. In filling up so many hundred moulds of the one, and so many of the other, I can easily ascertain which is the more profitable. But, be that as it may, it can certainly be said that the manufacture of brown sugar, worth 7½ cts., when the produce by the usual process was selling at 5 or 5½ cts., ought to be considered as a grand business.

As to the culture of the cane in the field, I have nothing new to notice. An actual progress has been made of late years in the management of our sugar plantations; but it is due to a series of small and gradual improvements, which would be tedious to detail. The most prominent one, however, consists in placing the cane-rows at a much greater distance from one another than was formerly done. By that means the planter can now do with the plow about three-fourths of the weeding for which the hoe alone was heretofore put in requisition. The cane being allowed more sun and air, can ripen and produce pretty good sugar in new soils, when, if planted as in time past, it would yield nothing but molasses. For old fields, the distance of the rows also permits the burying, as manure, the top canes and leaves, the removal of which, when they could not be sufficiently burnt in the row, was sometimes a source of annoyance. Some planters have lately used sub-soil plowing, but this, to state frankly my opinion on the subject, I consider as a kind of humbug. Their principle is to break the underground, so as to offer a passage for water, and to loosen the soil, in order to permit the roots of the canes to spread. I have always found that our soil, which is not generally tenacious or retentive, can be easily made to carry off on the surface the rain-water, by an old way of hilling the canes, which necessarily leaves a very deep furrow, and regular cross ditches at every arpent, or arpent and a half, with additional ones, whenever the land is uneven, to carry the rain-water to the main in long ditches. In a cane-field which has been in culture for a number of years, the ground, to the depth of 18 or 20 inches, is literally filled with cane-roots, as thick as the hair in the head. How can a plow, by going to the depth of twelve inches, procure new soil for these roots? It is certainly necessary to loosen the ground, even if it was only to prevent it being cracked, in very dry springs and summers; but I think loosening it to the depth of six or seven inches is all that is necessary for all useful purposes.

The plant canes of this year seem as good as they were in 1844, which was a very productive year. But in '44, the ratoons produced as much as the plant-cane, if not more; it was so, at least, on my plantation; and they are not as promising this year. My experience in the last twenty-five years has, however, taught me that there is no telling what the cane will actually yield before it is brought to the mill. Prime canes will sometimes give, on an average, two hogsheads

and a half to the arpent, while others, looking just as good in every respect, will yield in another year only a hogshead and a half. There is no criterion to determine, beforehand, the richness in the quantity of the juice to be obtained.

Having not seen Mr. Champomier's last statement, I cannot say whether it is correct or not as to this parish.

I know nothing personally of the culture of the cane in the West India islands, except Cuba, where I have traveled for the purpose of examining some new improvements in the manufacture of sugar. In the parts of the island which have long been in a state of cultivation, on the west side, and in the middle districts, round Guines, their lands are mostly worn out, and even if they now try to renew them, as some think of doing, with cow peas, we can still make more sugar than they do. I met with some plows round Matanzas, and they are, I suppose, used to some extent in the old districts; they cannot, however, do much with them, on account of the stiffness of their soil, and the quantity of stones. Some of the planters about Guines have given up their lands, and removed with their forces to the Haneaw district, a large valley which was not very long ago entirely wooded, and where there are now hundreds of planters. I have seen in that district, at M. Diago's, the ratoons of canes which had been put in the ground seventeen years before. They were certainly thick enough to be kept for another year, and perhaps longer. He went on increasing his plantation by putting in the ground every year, twenty-five arpents more. Their sugar-houses and other improvements are generally very much behind ours, but they take what time they please to manufacture, as they have scarcely anything else to do. Their weeding is performed by cutting once a year the weeds which grow through the dry cane-leaves, and that is done with the cane knife, the only instrument used on a plantation. They have no plows, no hoes, and no spades. In 1844 I sent twenty-four spades to Mr. Diago, and there were a few ditches made in that year.

In spite of the natural advantages which they enjoy, I think we make almost as much sugar to the hand as they do in the new districts. This is owing to the more advanced stage of our agriculture, and the superiority of our American negroes over their newly-imported African slaves. But although the quantity of manufactured sugar may be nearly the same, the yearly income of the Cuba planter is very different from that of the Louisianian; for him the expenses of a plantation are next to nothing, and I need not tell you what ours are. There are in the island of Cuba several plantations where sugar is manufactured by means of Derosne's apparatus, imported from France. Believing, after a careful examination, that they might be advantageously used here, I ordered one, with some few specifications, at the Novelty Iron Works, New York. It was put in operation last year on my plantation, and you are already aware of the result.

It is extremely difficult to answer with any accuracy your query about the cost of a plantation. A plantation for three hundred hogsheads of sugar may vary in cost from seventy-five thousand to one-hundred thousand dollars, according to the position, the quality of the land, the kind of improvements, &c., &c. There is but little differ-

ence between the expenses of putting up a substantial sugar-house, with steam-engine complete, for three or six hundred hogsheads of sugar; with the exception of the extent of the draining-houses, the cost is about the same, and may be valued at $15,000. On the other hand, by employing a year to grow the plant canes, and making temporary alterations in the buildings already in existence, and using creole horses to grind his canes, a cotton plantation may be converted into a sugar estate of over one hundred hogsheads at an actual cost which may not be more than $1,500. I have often heard of small, but industrious farmers, who, by making most of the improvements with their own hands, and grinding their canes with creole horses, have succeeded in making from ten to fifteen hogsheads in their cotton farms, with an outlay of five hundred dollars. The usual yield in sugar plantations is from five to eight hogsheads to the hand—the result must necessarily vary on account of the quality of the land and the industry or capacity of the planter. Some small planters are said to have made as much as ten hogsheads to the hand, but in those extraordinary yields, I am inclined to think that the slaves only have been taken into consideration, while the work done by the planter himself and his children, has been overlooked. Last year the planters in the neighborhood of the city and below, hardly averaged four hogsheads. In this part of the State the average was about five.

You will easily ascertain the cost of Rillieux' apparatus in New Orleans from Mr. Thompson or Mr. E. Barthe.

I must conclude this desultory letter. If you are tired by its length and tediousness, you must lay a part of the blame on your own shoulders, for a volume might be written in answer to your queries.

Your obedient servant, VALCOUR AIME,

Art. XIII.—THE AMERICAN LAKES:

THEIR COMMERCIAL IMPORTANCE, NAVIGATION, ETC.

THERE are four great sections of our republic destined to present to the world the most formidable front, whether regarded in point of population or commerce—the Atlantic frontier, the Gulf Coasts, the Mississippi Valley, and the Northern Lakes. We have published papers upon each of these interesting regions, and given their full statistics, with exception of the last. This we shall now touch in a short paper, with the promise of a more complete one, as soon as the important committee of the Chicago Convention—Mr. Spencer of New York, chairman, we believe—which has been intrusted with the subject, shall report.

Last year, James L. Barton, Esq., addressed a letter to Hon. Robert McClelland, which embodies many particulars, and furnishes the facts for the following paper.

Previous to 1832, the chief and only trade west of Detroit, was the supply of Indian tribes with provisions and goods, and returns of furs, etc., and for military service. The Black Hawk war, this year, attracted attention to the fertility of the country.

The steamer Walk-in-the-Water began her annual trips from Detroit to Macinac, in the service of the Fur Company, in 1819. The voyage which has become now a thing of no sort of note, was regarded among the marvelous at the time. Indeed, the New York "Mercantile Advertiser" is said to have announced it thus:

"The swift steamboat Walk-in-the-Water [her great speed may be judged of when it required ten days to make her trip to and from Buffalo to Detroit, and charged eighteen dollars for cabin fare!] is intended to make a voyage early in the summer from Buffalo on Lake Erie to Michilimackinac on Lake Huron, for the conveyance of company. The trip has so near a resemblance to the famous Argonautic expedition in the heroic ages of Greece that expectation is quite alive on the subject. Many of our most distinguished citizens are said to have already engaged their passage for this splendid adventure."

In 1826, Lake Michigan's waters were first opened to steam for pleasure excursions to Green Bay. Steamers chartered by government for military purposes made a first appearance at Chicago in 1832.

In 1833, there were 11 steamboats employed on the lakes, costing $360,000, and carrying 61,485 passengers. The number of boats in the Association service in 1833, had increased to 18, costing $600,000. In 1839, so great had become the trade to Chicago and ports west of Detroit, that a regular line of light boats from 350 to 650 tons was constantly employed from Buffalo.

In 1840, the number of boats on the lakes was 48, from 150 to 700 tons; cost of construction, $2,200,000. Business done to the west of Detroit by steamers, $2,200,000.

In 1841, from the increased quantity of agricultural productions brought from the shores of Lake Michigan this season, also a good many tons of lead and shot from the mines in that section of country, now for the first time in any considerable quantity, seeking a market by the lake route—and the very large increase of fashionable travel from New Orleans to the Northern States, during the hot season of the summer months—this route being preferred in consequence of its being more speedy, less expensive, more healthy than the lower route, and affording the traveler a view of the magnificent scenery of the islands and shores of the great lakes—I estimate that three-fourths of the business done by the Chicago and Green Bay boats this year is made from legitimate business west of Detroit, and amounts to $226,352 54.

Mr. Barton estimated in 1841, that there were 250 sail vessels owned on Lake Erie from 30 to 250 tons; cost each, $1,000 to $14,000—aggregate, $1,250,000; business done by them, $750,000.

Buffalo having become the great entrepot of north-western products seeking eastern markets, it is a good point of comparison and observation. Here the vast proportion of lake commerce centres. To have some notion of the value of this commerce, it is only necessary to inspect the records of the Erie canal for the last few years. Of course the notion will be an inadequate one, since large quantities of produce pass from that place *via* Erie, through the Pennsylvania canal; also from Cleveland and Toledo through the Ohio and Indiana canals, and Erie and Kalamazoo railroad; from Monroe and Detroit, by the Michigan, Southern and Central railroads; to Canadian markets, through the Welland canal; to New York, *via* Oswego canal, &c., not to speak of the great consumption of Buffalo itself, a city of

40,000 inhabitants perhaps, and ever entertaining crowds of emigrants on their way westward.

COMMERCE OF BUFFALO, 1843—45.

Kind and amount of Property, first entered or cleared on the Canal from Buffalo, bound toward tide-water.

		1845.	1844.	1843.
Fur and Peltry	lbs.	545,097	361,446	483,796
Boards and Scantling	feet	19,932,069	15,502,450	8,661,361
Shingles	M.	554	262	221
Timber	cubic feet	11,440	8,512	1,564
Staves	staves	89,174,110	61,515,236	34,747,261
Wood	cords	980	409	917
Ashes	bbls.	38,417	37,365	38,261
Pork	bbls.	28,235	52,417	48,556
Beef	bbls.	34,084	33,348	26,666
Bacon*	lbs.	1,218,811	....	....
Cheese	lbs.	2,759,928	2,304,827	2,901,778
Butter	lbs.	3,397,690	6,281,577	7,985,628
Lard*	lbs.	2,852,441	....	....
Wool	lbs.	3,441,317	2,643,148	1,249,524
Hides	lbs.	769,861	376,329	....
Flour	bbls.	721,891	851,180	880,868
Wheat	bushels	1,354,996	1,786,104	1,699,724
Rye	bushels	903	2,549	2,832
Corn	bushels	33,094	114,529	207,806
Barley	bushels	....	55	11
Other grain	bushels	9,040	8,231	22,096
Bread and Ship Stuffs	bushels	3,266	15,045	9,911
Peas and Beans	bushels	1,587	927	2,179
Potatoes	bushels	3,455	102	65
Dried Fruit	lbs.	7,837	193,272	144,219
Tobacco	lbs.	608,349	210,152	1,779,499
Clover and Grass Seeds	lbs.	2,487,336	3,248,488	2,660,794
Flax Seed	lbs.	184,563	126,482	787,669
Hops	lbs.	4,436	22,030	23,736
Domestic Spirits	gallons	272,336	69,352	198,828
Leather	lbs.	1,090,548	362,459	108,980
Furniture	lbs.	1,254,764	900,990	594,574
Bar and Pig Lead	lbs.	345,387	126,158	1,581,334
Pig Iron	lbs.	161,518	56,165	16,400
Iron Ware	lbs.	33,779	77,430	87,759
Domestic Woolens	lbs.	23,143	....	3,929
Domestic Cottons	lbs.	1,213	....	....
Merchandise	lbs.	295,185	224,123	167,309
Stone, Lime and Clay	lbs.	11,804,950	945,785	3,186,483
Gypsum	lbs.	1,594	....	1,669
Mineral Coal	lbs.	1,954,850	15,731	2,000
Sundries	lbs.	6,844,395	6,798,227	5,303,882

Kind and Quantity of Property received at Buffalo, via the Canal.

		1845.	1844.	1843.
Furs and Peltry	lbs.	14,862	14,872	31,731
Boards and Scantling	feet	3,140,959	2,822,406	908,833
Shingles	M.	....	....	7
Timber	cubic feet	84,344	109,499	45,162
Staves	lbs.	137,580	96,325	151,480
Wood	cords	13,025	14,440	12,428
Ashes	bbls.	4	....	....
Pork	bbls.	43	....	5
Cheese	lbs.	7,258	4,709	9,930
Butter	lbs.	7,565	5,340	6,878

* Previous to 1845 no distinction was made between pork and bacon, or between butter and lard.

	1845.	1844.	1843.
Lard ..... lbs.	200	....	....
Wool ..... lbs.	14,913	5,838	166
Hides ..... lbs.	319,272	298,222	....
Flour ..... bbls.	3,310	2,366	2,275
Wheat ..... bushels	271	11,072	7,508
Rye ..... bushels	3	....	....
Corn ..... bushels	....	....	2,424
Barley ..... bushels	11,013	4,967	17
Other Grain ..... bushels	10,564	....	1,000
Bread and Ship Stuffs ..... bushels	45,354	44,433	85,524
Peas and Beans ..... bushels	367	6	32
Potatoes ..... bushels	1,706	30	180
Dried Fruit ..... lbs.	807,599	22,495	25,693
Cotton* ..... lbs.	50,914	45,216	....
Tobacco ..... lbs.	120,364	61,052	166,072
Clover and Grass Seed ..... lbs.	11,558	6,870	2,428
Hops ..... lbs.	35,085	12,183	19,704
Domestic Spirits ..... gallons	17,840	4,992	4,775
Leather ..... lbs.	2,081	2,400	470
Furniture ..... lbs.	9,491,372	8,838,948	7,936,053
Pig Iron ..... lbs.	110,886	861,880	747,978
Iron Ware ..... lbs.	2,813,046	2,343,585	1,829,550
Domestic Cottons ..... lbs.	....	....	1,205
Salt ..... bushels	582,694	780,492	721,224
Merchandise ..... lbs.	100,893,428	93,678,706	88,296,036
Stone, Lime and Clay ..... lbs.	37,134,457	22,438,420	7,717,204
Gypsum ..... lbs.	493,179	149,612	66,142
Mineral Coal ..... lbs.	5,222,991	5,671,061	4,023,191
Sundries ..... lbs.	6,576,203	3,770,162	1,718,259

In the first six months of 1846 there were received at Buffalo—

	1846.	Incr. over 6 mos. '45.		1846.	Incr. over 6 mos. '45.
Flour ..... bbls.	563,312	317,657	Bacon ..... lbs.	1,478,705	659,853
Wheat ..... bu.	696,200	289,569	Lard ..... lbs.	2,223,151	616,511
Corn ..... bu.	421,475	406,967	Butter ..... lbs.	934,300	598,752
Oats ..... bu.	98,607	97,607	Tobacco .... lbs.	1,287,383	1,034,810
Pork ..... bbls.	41,245	19,918	Cotton ..... lbs.	95,265	95,265
Beef ..... bbls.	23,953	9,940			

In 1845, there were on lakes above Niagara Falls—

Steamboats	52	20,500 tons.
Propellers	8	2,500 "
Brigs	50	11,000 "
Schooners	270	42,000 "
Total	380	76,000 "

costing in their construction, $4,600,000.

On Lake Ontario there were 8 propellers, 7 steamers. The steamers on the lakes are of almost double the magnitude of those chiefly employed in 1841. In 1835, Ohio, the only exporting State on the lakes, sent through the Erie canal 86,233 barrels flour, 98,071 bushels wheat, 6,562 barrels provisions; in 1845, Ohio and other States sent by the same channel 717,466 barrels flour, 1,354,990 bushels wheat, 68,000 barrels provisions!

In speaking of the character of lake navigation, Mr. Barton remarks, "Take this whole fleet, in number over 500, of steamboats, steam propellers, brigs and schooners—for beauty of model, taste in rig, finish and furnishing, strength and firmness of construction, capacity for business, rapidity of movement, superior care and skill

* No cotton factory in Buffalo in 1843.

with which they are navigated, cannot be surpassed, if it can be equaled, on any waters in the world—ocean or inland. The storms and tempests on these lakes are as violent as on the Atlantic, and the danger of navigating them is known and acknowledged, by those who have tried both, to be equally as great, if not greater. Hence the superior character of the vessels employed upon them."

The following is a rough estimate of the value of lake commerce: "The amount, as shown by the tables appended hereto, and what is done from the extensive mills at Black Rock, which joins this city, in 1845, by an estimate made by the Canal Board of this State, from a system long adopted, and from experience found to give very near the true amount, is $28,000,000; add the commerce to and from this city, which never reaches the canal, and it will increase the sum $5,000,000 more: which amount is farther to be increased by all the business delivered on and taken from the lakes by the various *other* canals and railroads named in this communication; and the very large amount of what may be termed intermediate commerce between different ports on the lakes, which I put with great confidence at an equal amount with that done through Buffalo. And to all this must be added the amount done on Lake Ontario, which I place at $15,000,000, and I arrive without the fear of being refuted at an amount of $81,000,000, without including one dollar of the immense sums of money carried over these lakes."

Two hundred thousand persons are supposed, independently of crews, to have crossed the Upper Lakes in 1845, besides fifty thousand on Lake Ontario.

From the conclusion of the paper, we extract this passage:

"The commerce of these great lakes is of the highest importance to this Union, whether regarded in a commercial or national point of view.

"Commercially, as binding together by the strong ligaments of mutual interest and benefits a very large number of the States, who are thereby enabled to exchange their varied commodities of trade, one with the other, and with all; while each revolving year adds a new and stronger link to the bright chain of friendship and interest, which indissolubly connects them together. Nationally, as being an invaluable nursery and school for the creation of seamen, as well as furnishing the government with the cheapest, most prompt and efficient means of defense to an extended frontier. Only give the hardy navigators of these Northern and Western Lakes, channels of communication deep enough to swim their ships in, and harbors to protect them from tempests and storms, and government will always have at hand on this frontier, the ready means to repel insult and aggression, come when and from where it may."

COMMERCE OF AMERICAN CITIES.

THE commercial year, which closed on the 1st of September last, was one of the most remarkable and prosperous in the history of our country. From Maine to Mexico, from the Atlantic to the remotest borders of western civilization, the same interminable progress, the same unexampled prosperity, is to be marked. We shall devote a few pages to the examination of these results. Let us begin with

1.—NEW ORLEANS.

This extraordinary city, which it has pleased God, in all its fortunes and advances, to visit with the most fearful and desolating scourge in the summer through which we have but now passed, preserves its character. We have, over and over, dwelt in our pages, from the first number of our Review to the present, upon its population, its wealth, its resources, its advances, its prospects, &c. The reader, by consulting all of these papers, will obtain a mass of information of incalculable importance, not only upon this mart, but upon all the South-west and West. We have been lavish in material here. At this time we can only give the results of the past year, in order to have the records complete to date, and not to consume our pages by publishing any matter over twice. The chart of the city's commerce, which we published in the December number, 1846, had but a small circulation, few copies only having been printed, and our circulation has doubled since then. It will be necessary, on this account, to draw upon some of the tables contained in it in order to be complete. They were furnished us through the courtesy of our neighbors of the PRICE CURRENT, the best publication of the kind in the world.

EXPORTS OF TOBACCO FROM NEW ORLEANS TO 31ST AUGUST.

WHITHER EXPORTED	1846-47.	1845-46.	1844-45.	1843-44.	1842-43.	1841-42.	1840-41.	1839-40.	1838-39.	1837-38.
Liverpool	3,374	8,976	4,947	8,808	6,788	6,930	5,252	3,827	4,115	2,695
London	5,173	12,888	6,475	8,291	9,851	7,212	8,732	4,320	3,725	3,579
Glasgow and Greenock	....	....	....	....	....	....	....	....	37	....
Cowes, Falmouth, &c	1,148	2,641	1,131	5,424	10,798	6,827	6,684	992	871	3,695
Cork, Belfast, &c	....	....	....	....	....	....	....	....	....	....
Havre	1,159	2,215	3,514	4,846	4,648	4,037	4,224	3,655	1,455	2,858
Bordeaux	242	1,067	1,565	1,156	2,332	1,004	814	1,107	....	504
Marseilles	2,096	1,006	3,934	5,102	4,665	1,933	1,774	1,844	315	1,516
Nantz, Cette, and Rouen	....	....	....	....	....	....	....	....	....	....
Amsterdam	....	451	50	3,775	2,700	1,138	....	....	224	....
Rotterdam and Ghent	568	1,104	1,014	917	2,933	1,884	....	....	....	....
Bremen	4,446	6,328	12,012	6,602	7,888	8,997	4,012	2,464	1,366	1,508
Antwerp, &c	1,652	4,294	3,862	2,178	5,657	3,690	1,219	1,090	....	....
Hamburg	403	181	786	2,305	1,477	3,401	1,064	1,465	....	266
Gottenburg	949	943	909	734	963	946	1,559	745	939	576
Spain and Gibraltar	11,795	9,843	6,749	10,681	4,496	7,204	4,142	3,843	3,400	1,542
Havana, Mexico, &c	....	....	903	1,601	1,063	981	1,020	1,013	618	725
Genoa, Trieste, &c.	5,046	2,375	3,001	1,556	1,760	550	2	44	598	563
China	....	....	....	....	....	....	....	....	....	....
Other foreign ports	1,009	298	794	1,177	217	516	667	343	315	186
New York	5,458	4,848	6,936	6,960	10,533	7,090	7,466	8,132	8,174	9,758
Boston	2,664	913	4,938	2,586	3,650	2,351	3,109	2,888	2,816	2,616
Providence, R. I.	....	....	....	....	....	....	....	....	....	....
Philadelphia	2,779	1,030	2,536	1,286	2,845	936	2,126	1,963	1,291	1,649
Baltimore	301	427	478	1,167	2,433	208	517	219	296	779
Portsmouth	....	....	....	....	....	....	....	....	....	....
Other Coastwise Ports	115	217	2,145	1,100	2,194	225	287	482	225	617
Western States	....	....	....	....	....	....	....	....	....	....
Total	50,376	62,045	68,679	81,249	89,891	68,058	54,667	40,436	30,780	35,555

RECAPITULATION.

Great Britain	9,695	24,505	12,553	22,523	27,437	20,969	20,665	9,139	8,748	9,969
France	3,497	4,288	9,013	11,104	11,845	6,974	6,812	6,606	1,770	4,878
North of Europe	8,018	13,301	19,051	20,175	21,618	20,252	8,040	6,005	2,654	2,438
South of Europe and China	17,849	12,516	11,029	14,349	7,536	9,053	5,645	5,002	4,806	2,860
Coastwise	11,317	7,435	17,033	13,098	21,455	10,810	13,505	13,684	12,802	15,410
Total	50,376	62,045	68,679	81,249	89,891	68,058	54,667	40,436	30,780	35,555

OTHER EXPORTS OF NEW ORLEANS, TO SEPTEMBER 1.

TO	1846-7.								1845-6.								1844-5.							
	Flour, bbls.	Pork, bbls.	Bacon, hhds.	Lard, Kegs.	Beef, bbls.	Lead, Pigs.	Whiskey, bbls.	Corn, sacks.	Flour, bbls.	Pork, bbls.	Bacon, hhds.	Lard, kegs.	Beef, bbls.	Lead, pigs.	Whiskey, bbls.	Corn, sacks.	Flour, bbls.	Pork, bbls.	Bacon, hh s.	Lard, kegs.	Beef, bbls.	Lead, pigs.	Whiskey, bbls.	Corn, sacks.
New York	63877	77828	3480	209845	9167	339560	8210	107890	83854	88228	2873	204323	5162	309681	4098	172186	74802	56046	1565	119967	5805	339345	2592	30051
Boston	96507	76755	2379	185513	9053	123917	1162	139678	122148	89164	846	190504	3501	139364	150	289523	75960	79617	727	133474	5922	135489	600	81341
Philadelphia	13396	5247	852	53577	564	135489	4856	15324	250	29783	1238	69153	99	70113	647	3671	3638	17242	834	39275	874	88810	1256	....
Baltimore	3637	17167	1159	23551	556	9962	7103	3253	....	19523	729	39619	446	11951	2175	1000	....	13165	624	23163	350	17455	500	....
Charleston	7720	1004	2874	536	150	465	8180	809	11476	2828	1962	5677	275	4620	8982	87953	1100	1038	2533	9332	24	....	4422	4382
Other coastwise ports	38381	11033	11092	12813	2943	1000	33005	43842	68441	13434	12720	20671	4490	8460	41869	175582	43959	5603	5559	13315	1827	78	22495	67513
Cuba	43051	1092	1015	144002	467	149	....	133798	7094	1005	610	92336	391	....	....	....	23787	520	190	89997	206	....	....	9056
Other foreign ports	1053037	40394	3053	293714	29096	13716	743	2076228	279931	28354	64	168621	43798	174086	260	211674	55891	8178	50	39815	8961	126262	495	27912
Total	1319506	230520	25904	907977	51996	624258	63259	2520813	573194	272319	21042	790904	58162	718285	58181	941589	279137	181409	12082	468338	23969	707439	32360	230295

☞ In the above the exports to Mobile, &c., via the Pontchartrain railroad and new canal, are included.

MONTHLY ARRIVALS OF SHIPS, BARQUES, BRIGS, SCHOONERS AND STEAMBOATS AT NEW ORLEANS, TO AUGUST 31.

MONTHS.	1846-7.							1845-6.						1844-5.						1843-4.						1842-3.					
	Ships.	Barques.	Brigs.	Schooners.	Steamships	Total.	Steamboats	Ships.	Barques.	Brigs.	Schooners.	Total.	Steamboats	Ships.	Barques.	Brigs.	Schooners	Total.	Steamboats	Ships.	Barques.	Brigs.	Schooners	Total.	Steamboats	Ships.	Barques.	Brigs.	Schooners.	Total.	Steamboats
September	37	12	19	42	7	117	141	21	7	7	14	52	164	26	9	12	8	55	120	22	7	14	27	70	104	16	7	9	15	47	124
October	78	30	31	80	7	226	177	86	25	20	26	157	234	69	16	14	6	105	165	55	13	21	25	114	178	53	10	27	15	105	145
November	67	35	63	63	9	237	281	81	22	33	39	175	220	74	25	29	28	156	233	117	36	53	36	242	230	124	35	30	35	224	185
December	72	45	62	43	8	230	337	80	49	48	42	219	245	83	39	37	29	188	289	81	43	49	57	230	309	67	41	49	38	195	266
January	78	64	91	99	6	328	346	67	77	74	62	280	298	118	48	57	48	271	279	65	24	42	47	178	292	39	28	54	35	156	285
February	42	34	63	85	5	229	298	22	21	36	50	136	293	52	44	55	52	204	272	73	32	37	40	182	278	47	30	77	70	224	246
March	83	53	72	105	1	314	317	67	24	33	32	156	299	93	40	62	49	244	281	69	25	40	38	172	270	75	50	95	83	303	240
April	86	41	45	86	6	264	293	110	40	47	37	234	294	78	34	48	34	194	242	82	29	54	39	204	262	60	25	82	79	246	221
May	77	51	87	166	11	392	284	60	30	27	61	178	271	32	19	12	25	88	228	46	22	30	32	130	236	105	28	47	50	230	220
June	51	38	54	101	19	263	251	44	25	42	30	141	184	52	12	6	14	84	168	29	16	16	25	86	188	57	16	38	45	156	175
July	53	30	52	67	16	218	174	52	24	39	61	176	151	23	8	8	12	51	154	10	5	12	10	37	120	24	7	7	34	72	147
August	45	18	24	52	14	153	125	43	33	41	64	181	117	18	3	10	11	42	99	16	4	8	13	41	103	12	6	17	25	60	90
	769	451	663	989	109	2981	4024	743	377	447	518	2085	2770	718	297	351	316	1682	2530	665	256	376	389	1686	2570	679	283	532	524	2018	2324

EXPORTS SUGAR AND MOLASSES, TO AUGUST 31, FROM NEW ORLEANS—RIVER TRADE NOT INCLUDED.

	1846–7.				1845-6.			
	Sugar.		Molasses.		Sugar.		Molasses.	
	hhds.	bbls.	hhds.	bbls.	hhds.	bbls.	hhds.	bbls.
New York	16,754	802	2,842	15,861	33,068	2,418	3,002	17,515
Philadelphia	11,653	653	60	4,512	21,804	2,421	580	13,925
Charleston, S. C.	3,147	647	..	3,238	3,412	1,198	2	6,328
Savannah	1,352	58	..	1,752	1,062	65	..	2,214
Providence and Bristol, R. I.	..	..	..	..	..	..	579	240
Boston	695	43	22	413	3,208	1,288	318	1,402
Baltimore	5,981	395	337	3,348	9,143	1,672	185	5,181
Norfolk, Richmond & Petersb'g, Va.	4,806	966	252	3,225	3,997	1,215	27	3,767
Alexandria, D. C.	156	..	..	511	175	..	..	428
Mobile	3,783	1,038	..	6,497	5,739	1,020	10	13,464
Apalachicola and Pensacola	1,415	473	..	2,565	1,067	158	..	2,039
Other ports	371	76	540	286	533	8	..	671
Total	50,113	5,451	4,053	42,208	83,208	11,493	4,703	67,214

	1844–5.				1843–4.				1842–3.			
	Sugar.		Molasses.		Sugar.		Molasses.		Sugar.		Molasses.	
	hhds.	bbls.	hhds.	bbls.	hhds.	bbls.	hhds.	bbls.	hhds.	bbls.	hhds.	bbls.
New York	49,442	6,794	9,875	34,322	11,422	217	1,882	15,744	31,549	..	7,285	28,030
Philadelphia	21,392	1,422	2,418	11,575	8,478	697	354	4,214	14,474	708	1,288	9,091
Charleston, S. C.	4,426	95	..	5,610	1,502	..	..	5,467	1,090	100	63	3,986
Savannah	782	10	..	2,686	483	..	..	1,254	240	..	..	1,640
Providence and Bristol, R. I.	..	..	..	1,472	1,051	..	..	475	55	..	..	576	106
Boston	6,062	543	2,124	14,221	217	..	..	1,001	2,814	..	976	4,809
Baltimore	12,564	480	547	10,943	5,492	42	586	5,231	8,660	663	1,162	8,459
Norfolk	4,500	208	96	6,029	562	..	..	2,039	610	28	..	947
Richmond & Petersburg, Va.					1,590	1	..	1,581	2,337	..	216	2,316
Alexandria, D. C.	201	..	95	84	280	..	..	350	592	..	..	575
Mobile	3,534	668	76	5,218	3,257	17	..	2,836	3,011	375	..	3,313
Apalachicola and Pensacola	833	102	..	1,795	1,070	548	..	2,440	565	306	..	2,260
Other ports	760	239	391	881	42	22	112	750	102	100	800	1,969
Total	104,501	10,561	17,094	94,415	34,395	1,544	3,409	42,962	66,044	2,280	12,366	66,901

RECEIPTS PRODUCE AT NEW ORLEANS, 1847, AND VALUE.

Articles.	Amount.	Average.	Value.
Apples ..... bbls.	39,612	$ 3 00	$ 118,836
Bacon, assorted ..... hhds. and casks	28,607	60 00	1,716,420
" " ..... boxes	8,325	30 00	249,750
" hams ..... hhds. and tierces	14,518	65 00	943,670
" in bulk ..... lbs.	425,163	0 06	25,509
Bagging ..... pieces	60,982	10 50	640,311
Bale rope ..... coils	56,201	6 00	337,206
Beans ..... bbls.	24,536	4 00	98,144
Butter ..... kegs and firkins	51,384	5 00	256,920
" ..... bbls.	872	20 00	17,440
Beeswax ..... bbls.	1,109	40 00	44,360
Beef ..... bbls.	32,738	10 00	327,380
" ..... tierces	21,230	16 00	339,680
" dried ..... lbs.	49,000	0 07	3,430
Buffalo robes ..... packs	55	60 00	3,300
Cotton ..... bales	740,669	44 00	32,589,436
Corn meal ..... bbls	88,159	3 50	308,505
" in ear ..... bbls.	619,576	1 10	681,533
" shelled ..... sacks	2,386,510	2 00	4,773,020
Cheese ..... boxes	57,429	3 50	201,001
Candles ..... boxes	8,496	3 50	29,736
Cider ..... bbls.	477	3 00	1,431
Coal, Western ..... bbls.	356,500	0 75	267,375
Dried apples and peaches ..... bbls.	8,770	2 50	21,925
Feathers ..... bags	3,498	25 00	87,450
Flaxseed ..... tierces	962	9 00	8,658
Flour ..... bbls.	1,617,675	5 50	8,897,213
Furs ..... hhds., bundles and boxes	328	..	600,000
Hemp ..... bundles	60,238	15 00	903,570
Hides	98,342	1 25	122,927
Hay ..... bundles	95,231	3 00	285,693
Iron, pig ..... tons	1,151	30 00	34,530

Articles.		Amount.	Average.	Value.
Lard	hhds.	143	$80 00	$ 11,440
"	bbls. and tierces	117,077	23 00	2,692,771
"	kegs	275,076	4 00	1,100,304
Leather	bundles	3,716	20 00	74,320
Lime, Western	bbls.	5 994	1 00	5,994
Lead	pigs	650,129	2 75	1,787,854
" bar	kegs and boxes	1.291	15 00	19,365
Molasses (estimated crop)	gallons	6,000 000	0 24	1,440,000
Oats	bbls. and sacks	588 337	0 90	529,503
Onions	bbls.	7,185	2 00	14,370
Oil, linseed	bbls.	3,637	20 00	72,740
" castor	bbls.	1.439	20 00	28,780
" lard	bbls.	2 573	22 00	56,936
Peach brandy	bbls.	72	16 00	1,152
Potatoes	bbls.	142,888	2 00	285,776
Pork	bbls.	302,170	12 00	3,626,040
"	hhds.	9.452	40 00	378,080
" in bulk	lbs.	8,450,720	0 06	507,042
Porter and Ale	bbls.	1,363	7 50	10,222
Packing Yarn	reels	2,193	5 00	10,965
Skins, deer	packs	1,784	20 00	35,680
" bear	packs	71	15 00	1,065
Shot	kegs	3,992	18 00	71,856
Soap	boxes	4,361	2 60	11,338
Staves	M.	2,000	25 00	50 000
Sugar (estimated crop)	hhds.	140.000	70 00	9,800,000
Spanish moss	bales	5,990	4 00	23.960
Tallow	bbls.	6,658	20 00	133,160
Tobacco, leaf	hhds.	44,588	55 00	2,452,340
" strips	hhds.	11,000	100 00	1,100,000
" chewing	kegs and boxes	3,930	12 50	49,125
"	bales	1,001	3 00	3,003
Twine	bundles and boxes	1,334	7 00	9,338
Vinegar	bbls.	1,059	4 00	4,236
Whiskey	bbls.	126,553	10 00	1,265,530
Window-glass	boxes	3,805	4 00	15,220
Wheat	barrels and sacks	833,649	2 30	1,917,392
Other various articles—estimated at				5,500,000

Total value	$90,033,256
Total in 1845–6	77,193,464
Total in 1844–5	57,199,122
Total in 1843–4	60,094,716

COTTON RECEIPTS, EXPORTS, AND STOCKS.

PORTS.	Stocks on hand Sept. 1.		Received since 1st September.		Exported from Sept. 1, 1846, to dates.					Stk. on hand & on ship-bd	
	1846	1845	1846.	1845.	To Great Britain.	To France	Other For'gn Ports.	Total Foreign Ports.	U. S. North Ports.	1847	1846
New Orleans ···Aug. 31	6332	7556	707324	1041393	385368	95719	83920	565007	158501	23493	6332
Mobile·····Aug. 24	7476	609	324221	421186	127518	38638	19784	185940	97853	31535	7000
Savannah ·····Aug. 19	5922	2736	233374	184563	107227	11150	944	119321	96009	5958	6524
Charleston·····Aug. 20	8709	10879	348538	248766	121682	51452	17222	190356	156040	28478	8372
Florida ·····Aug. 20	1088	100	127918	139381	30896	2592	3238	36726	71876	2345	1943
Virginia ·····Aug. 6	100	2118	11130	12125	152	....	....	152	....	250	280
N. Carolina·····Aug. 6	100	100	6073	9401	....	....	....	....	....	400	1000
New York·····Aug. 17	46539	43887	....	....	49440	36111	34898	120449	....	108013	54200
Other Ports·····Aug. 14	20950	25841	....	....	947	425	686	2058	....	4480	5657
Total, bales·····	97216	94126	1758578	2056815	823210	236087	160692	1219989	581279	204942	91228
Total to dates, 1846·····	94126	....	2056815	....	1097386	355386	194416	1647188	584507	91228	....
Increase this year··	3090	....	....	....	....	....	....	....	....	113714	....
Decrease·····	....	...	298237	....	274176	119299	33724	427199	3228	....	....

Receipts from Mobile and Florida are taken from New Orleans; from Charleston, those received from Savannah; from Mobile, the receipts from Florida. Exports from Georgetown, S. C., to N. Y., are added to Charleston receipts; exports from Darien, to Savannah receipts; exports from Mobile and Florida, to

New Orleans; and from Savannah to Charleston, are deducted from exports to Northern ports.

COMMERCE OF NEW ORLEANS.

Comparative Arrivals, Exports, and Stocks of Cotton and Tobacco at New Orleans for ten years, from 1st September each year to date.

Years.	COTTON—BALES. Arrivals.	Exports.	Stocks.	TOBACCO—HHDS. Arrivals.	Exports.	Stocks.
1846–47	740,669	724,508	23,493	55,558	50 376	22,336
1845–46	1,053,633	1,054,857	6,332	72,896	62,015	17,924
1844–45	979,238	984,616	7,556	71,493	68,679	7,673
1843–44	910,854	895,375	12,934	82,435	81 249	4,859
1842–43	1,089,642	1,088 870	4.700	92,509	89 891	4,873
1841–42	740,155	749,267	4.428	67,555	68,058	2,255
1840–41	822 870	821,228	14,490	53 170	54,667	2,758
1839–40	954 445	949,320	17,867	13,827	40,436	4,409
1838–39	578,514	579,179	10,308	28,153	30,780	1,294
1837–38	742,720	738,313	9,570	37,588	35,555	3,834

Comparative prices of middling to fair Cotton at New Orleans, &c.

	1846-7.	1845-6.	1844-5.	1843-4.	1842-3.
September	7½@ 9	7½@8¾	6 @7½	5½@ 8	6 @
October	8¼@10	6⅝@8¾	5¼@7½	7 @ 8¼	6½@8
November	9 @10½	7 @8	5½@6⅞	6¾@ 8	5½@7¼
December	9 @10½	6½@7¾	4⅝@6½	7½@ 8⅝	5¼@7¾
January	10 @11½	6½@7⅝	4⅝@6½	8¼@10½	5½@7¼
February	11½@13	7⅛@7¾	4¼@6½	8¼@10	5½@7½
March	9½@11	6½@8½	5 @6½	8½@ 9¾	4½@7
April	10⅝@11⅜	6⅛@8⅜	5¼@7½	7½@ 9¼	4⅝@7⅛
May	10⅛@12½	6½@8½	5¼@7¼	6¼@ 8¼	5½@7¼
June	9¼@11¼	6½@8	5¼@7¼	7 @ 8½	5¼@8
July	9½@10¾	6½@8	6½@7½	6½@ 8½	5¼@8
August	10½@12	7 @8½	6¼@7¼	6½@ 8	5¼@8
	bales.	bales.	bales.	bales.	bales.
Receipts at N. O.	707.324	1,053,633	979.238	910,854	1,089,642
Crop of U. S.	1,800,000	2,100,537	2,400,000	2,030,409	2,378,875

Imports of Specie for three years, from 1st September to 1st August.

1846–7	$6,680,050
1845–6	1,872,071
1844–5	2,249,138

Monthly arrivals of Flat-boats for the past season.

MONTHS.	Ohio.	Kentucky.	Indiana.	Virginia.	Pennsylva.	Illinois.	Missouri.	Iowa.	Arkansas.	Alabama.	Tennessee.	Miss'sippi.	Total.
September	7	..	1	..	..	1	..	..	..	..	2	2	13
October	13	2	6	..	5	1	..	..	..	..	1	..	28
November	51	..	19	1	12	1	3	..	1	..	2	2	107
December	157	..	54	10	31	5	6	..	1	..	4	1	301
January	69	..	110	9	15	7	5	1	..	..	8	..	242
February	129	36	103	..	12	14	2	1	2	1	12	8	320
March	74	26	109	1	9	6	1	..	1	25	26	9	287
April	117	72	187	9	14	30	1	..	1	33	17	9	490
May	57	51	67	4	8	22	2	..	..	11	21	..	243
June	79	20	42	1	..	10	..	6	..	4	19	..	181
July	60	21	63	1	2	12	..	3	..	..	6	1	169
August	4	3	3	1	..	..	..	..	..	..	..	..	11
Total	817	296	764	37	108	109	20	11	6	74	118	32	2392

Also about 400 from various States with cattle, sheep, hogs, lumber, &c., making a total of 2,792.

Foreign Merchandise.—Direct Imports of Coffee, Sugar, and Salt for three years, from September 1 to August 31.

		1846-7.	1845-6.	1844-5.
Coffee, Havana	bags	43,931	10,899	4,094
Coffee, Rio	bags	205,111	215,031	167,669
Sugar, Havana	boxes	45,889	5,442	3,473
Salt, Liverpool	sacks	344,852	259,481	361,486
Salt, Turks' Island, &c	bush	194,431	110,849	518,407

Prices of Sugar on the Levee.

	1846–7.	1845–6.	1844–5.	1843–4.	1842–3.
	cents.	cents.	cents.	cents.	cents.
September	4¼@7½	6 @6½	5 @6¾	5½@6¾	2 @4¾
October	6¼@9	6 @7½	5 @6¾	6 @7	4 @6¾
November	5¼@7	5 @7	4 @5¾	5 @6½	3½@6
December	4¼@7	4 @6½	3 @5¾	4½@6½	3½@4¾
January	5 @7½	4¼@6½	2¾@5¾	4¾@7½	3 @4¾
February	5 @7½	4 @6½	2¾@5¾	5 @7½	3½@5
March	5¼@7½	4 @6½	3 @5½	5 @7½	3½@5
April	5¾@7½	4 @6¼	5 @6¾	5¼@7½	3½@5
May	5 @7½	4¼@6½	5 @6¾	5¼@7½	3¾@5¼
June	5 @7½	4 @6½	4½@6¼	4¾@6¾	4¼@5¾
July	5 @7¾	4 @6¾	4½@6½	4¾@6¾	4½@6
August	5¼@8	4¼@7½	5¼@7	4½@6¾	5 @6¼

Prices of Molasses on the Levee.

	1846–7.	1845–6.	1844–5.	1843–4.	1842–3.
	cents.	cents.	cents.	cents.	cents.
September	15 @22	24 @27	26 @28	18 @21	10 @12
October	20 @25	21 @24	24 @26	23 @24	9 @11
November	26 @26½	21 @22	20 @21	14 @20¼	11 @17
December	23 @23½	20 @—	20¼@20¾	20 @21	14 @15½
January	24½@25	21 @21½	16½@17½	22½@23	12 @13½
February	27 @—	21 @21½	14½@16	22 @23	13 @14
March	29 @29½	22½@23	20¼@21	23 @24	11 @12½
April	25 @29	25 @25½	25 @26	23 @25	15 @16
May	26 @30	23 @23½	24 @27	25 @26½	15½@16
June	26 @30	18 @22	18 @27	24 @25	17½@19
July	26 @30	15 @20	20 @27	24 @26	19 @22
August	28 @31	15 @21	26 @28	25½@26¼	20 @22

Prices of Flour on the Levee.

	1846–7.	1845–6.	1844–5.	1843–4.	1842–3.
	dollars.	dollars.	dollars.	dollars.	dollars.
September	3½@4	3½@4½	—@6	4½@4¾	4½@4¾
October	4 @4½	3¾@4½	3¾@4¾	4 @4¾	3½@3¾
November	5 @5½	4½@5½	4 @4½	4 @4½	3½@4
December	4½@5¾	7½@8½	4 @4¾	4½@4½	4½@—
January	4¾@5½	5½@7	4¾@5½	4¾@4½	4 @—
February	6 @6½	5 @6½	3¾@4½	4½@—	3½@3½
March	5½@6½	4¾@5½	4 @4¾	4½@4¾	3½@3½
April	6 @6½	4½@5	3½@4¾	4½@4½	3½@4
May	5½@6½	4 @4¾	3½@4½	4½@4½	3½@3¾
June	6¾@7½	3¾@4½	3¾@4¾	3½@3¾	4¾@5
July	6 @7	3 @4	3½@4¾	3½@4½	4½@5¾
August	4 @5½	3½@4	4 @4¾	4 @5½	4 @4½

Prices of Corn in sacks on the 1st of each month.

	1846–7.	1845–6.	1844–5.	1843–4.	1842–3.
	cents.	cents.	cents.	cents.	cents.
September	36@40	40@42	43@44	42@43	33@34
October	60@65	35@38	40@—	37@40	32@33
November	58@75	45@50	43@45	34@35	30@31
December	60@70	80@82	34@37	43@45	45@47
January	55@67	55@63	37@38	36@38	34@35
February	80@90	40@50	38@40	32@33	26@28
March	75@90	47@52	40@41	35@35	28@30

	1846–7.	1845–6.	1844–5.	1843–4.	1842–3.
	cents.	cents.	cents.	cents.	cents.
April	80@95	42@50	35@36	40@42	35@36
May	55@70	40@50	35@38	40@41	35@40
June	65@80	35@40	28@32	33@35	34@35
July	65@75	25@32	30@34	40@43	42@—
August	40@50	30@35	34@36	40@45	40@42

Prices of Mess and Prime Pork on the first of each month.

	1846–7		1845–6	
	Mess.	Prime.	Mess.	Prime.
September	$ 8¼@ 8⅞	$ 6½@ 6¾	$17 @17½	$13 @13½
October	8½@ 8¾	7 @ 7½	16 @—	11¾@12¼
November	9⅛@ 9⅜	8 @ 8¼	14¼@14½	10¾@11
December	8⅜@ 9	7½@—	15½@16	13½@—
January	9¼@ 9½	8¼@ 8¾	15½@15¾	13¾@14
February	14 @14½	12 @13	10½@11	9½@10
March	15 @15½	12½@12¾	10¾@11	9¼@10
April	15 @15½	12½@12¾	11 @11¼	9 @—
May	16 @16¼	12⅝@12¾	10¾@10⅞	8¼@ 8⅝
June	15⅝@16¼	12½@12¾	9¾@10	7¾@ 8
July	16¼@16½	13¼@13½	9 @ 9¼	7 @ 7¼
August	16 @—	13 @—	8¼@ 9	6½@ 7

Exchange on London, Paris, and New York on the 1*st of each month* (60 *day bills*).

	1846–7.			1845–6.			1844–5.		
	London. pm.	Paris. pr. ct. $	New York. dis.	London. pm.	Paris. pr. ct. $	New York. dis.	London. pm.	Paris. pr. ct. $	N. Y. dis.
September	8	5 31	1½	9½	5 26	¼	9½	5 28	¼
October	8¼	5 32	1⅜	8⅛	5 31	2	8½	5 31	1¼
November	7	5 41	1⅞	8	5 32	2	8½	5 31	1¼
December	5½	5 48	1⅜	6	5 37	2⅛	8¼	5 27	1⅛
January	4¼	5 50	2	7	5 36	2⅛	8½	5 30	1¼
February	5	5 45	2½	6⅜	5 37	2¼	8¼	5 28	1½
March	3	5 50	2⅞	6¼	5 37	2⅜	8¼	5 30	2
April	2	5 55	2¾	7⅛	5 35	2	7	5 31	2
May	5	5 45	1⅞	8¼	5 31	1⅞	8½	5 27	1½
June	4½	5 40	2¼	7½	5 40	2⅛	9	5 28	¼
July	5	5 36	2	6½	5 42	2⅛	9¼	5 30	⅛
August	4½	5 38	1⅞	7	5 41	1¼	10	5 27	par

Rates of Freight on Cotton on the first of each month.

	1846–7			1845–6		
	Liverpool.	Havre.	New York.	Liverpool.	Havre.	New York.
September	⅛d.	1 1-16	⅛ct.	9-16d.	1 ct.	⅛ ct.
October	⅛	1 1-16	⅛	9-16	1⅛	9-16
November	⅛	⅞	⅛	⅛	1	⅛
December	⅛	1	⅛	9-16	1⅛	⅛
January	⅛	1⅛	⅛	7-16	⅞	7-16
February	9-16	1⅛	⅛	7-16	⅞	⅛
March	1	2	1⅛	⅛	1 1-16	⅛
April	⅛	1⅛	⅛	⅛	1 1-16	⅛
May	⅛	1⅛	⅛	⅛	1⅛	9-16
June	9-16	1	⅛	⅛	1⅛	⅞
July	⅛	1⅛	⅛	9-16	1⅛	⅛
August	⅛	1⅛	⅛	17-32	1⅛	9-16

The annual statements of the PRICE CURRENT and COMMERCIAL TIMES, certainly the most complete and valuable commercial reports made by the press of our country, and probably of the world, on the first day of September last, have many judicious reflections. Some of them we shall take the liberty of noting.

Mr. Littlefield opens with a review of the extraordinary results in the corn and cotton markets—the fluctuations—the advances, etc. The famine in Europe, however beneficial to western granaries, could only be injurious to southern cotton fields—"dear food and dear clothing cannot be maintained at the same time."

From reflections such as these, he passes in review the wonderful developments of the magnetic telegraph and its extension southward, the Ocean Steamship navigation, the Mexican war, etc.

Mr. Huyliger, in relation to the COTTON prospects of another year, remarks, after reviewing the whole operation of the last, &c.:

Having thus brought down the operations of the season to their final close, it may not be amiss to offer some few remarks with regard to the future. The prospect for a continuance of the present range of prices, appears to be decidedly favorable. The stocks of cotton in Liverpool, Havre, and at all other points, are reduced to a lower figure than they have reached for the last nine years, and this in the face of a greatly diminished consumption brought about by a general resort to working short time. The result is, that the stocks of manufactured goods all over the world, have been materially lessened, while, at the same time, the supply of the raw material in the hands of the spinners is represented to be much smaller than usual. Unquestionably the main obstacle last season, in the way of a permanent improvement and stability in the trade, was, the extravagant value and scarcity of food all over Europe, which, bringing in its train a multiplicity of other evils, such as an extreme tightness of money matters and high rates of freight, at one time forced the price of cotton much below its intrinsic value. Reasoning, as we may do, that opposite causes are likely to produce opposite effects, it is a source of satisfaction to know, that, from present appearances, no such disturbing circumstances will be brought to bear upon the market during the coming season, or that if they do affect us in any degree, it will be in a greatly diminished ratio, compared with the intensity of last year. From all accounts the harvest in England will be abundant, and although supplies of our breadstuffs may probably be required for Ireland, yet it is not apprehended that the shipments will be sufficiently large to derange the monetary system of the country. In the Southern portion of Europe, the grain crops have been already gathered, and in the North the promise is so good, that no supplies will be needed for the Continent. Under these circumstances, we have every right to expect a material improvement in trade; in fact it has already shown itself in England, in the more general approximation of the price of goods to the raw material, and bids fair to be permanent, without the intervention of some unexpected reverse."

Both statements comment upon the great falling off in the receipts of TOBACCO, amounting to 17,000 hhds. The *Times* attributes it to reduced cultivation, though large stocks are stated as having not yet reached market. The *Price Current* remarks:

As regards the quality of the past crop, it did not by any means equal the expectations that were formed of it early in the season. On the Ohio river, and in some sections of Tennessee, it was unusually good; but in most other parts of the country it was generally rather common, and in some regions very poor.

We would again call the attention of our planting friends to the decided and increasing preference shown in this market to tobaccos of a *marked character*; which go off so much more readily than those of a nondescript kind. They will, we are persuaded, find it greatly to their interest so to cure their tobacco as to make it *dark and rich* or *light and leafy*.

The two statements differ in reference to SUGAR; the *Times'* estimate of last year's crop with stocks being 152,000; the *Price Current's*, 142,500. This will show the uncertainty of the matter. An importation of 45,000 boxes Havana sugars against 5,000 in 1845-6 had a marked effect upon Louisiana sugars. The distribution of the crop has been as follows: consumption of city and neighborhood sold in small parcels, &c., 14,000 hhds.; refiners in city and State, 3,000 hhds.; stock 4,000; exports generally, 51,500, including from Attakapas which did not reach New Orleans, 51,500 hhds.; estimated exports up the Mississippi for the western States, 70,000 hhds.; being 5,000 less than last year. The West has however supplied itself partially from Cuba in consequence of deficient supplies at home. The *Price Current* concludes:

With regard to the crop now in progress, it affords us pleasure to state that all accounts from the interior concur in representing it as affording most flattering promise. And should the weather continue favorable, and the cane escape the blighting effects of an early frost, there is good reason to expect that the product of this important staple of our State will exceed that of any previous year since the introduction of its cultivation. The following is a statement of the crops

for a series of years, by which it will be seen that the product is subject to remarkable fluctuations.

There is a difference of 1,000,000 gallons in the two estimates of the MOLASSES crop of last year. The Times makes it 7,000,000 gallons against 9,000,000 of the previous year—about 65 per cent. of which was consumed in the southern and western States. The imports of Cuba molasses were very large.

We copy the Price Current's judicious remarks upon Western produce:

"In our previous annual reports the branches of our commerce embraced under this head have commanded more and more of our attention, from year to year, according to their rapidly extending importance; but during the past season, particularly in the department of *breadstuffs*, they have attained to a prominence which gives remarkable evidence of the surprising advancement of the fertile West, in the development of her great resources. In corroboration of this position it will be seen, by reference to our tables, that the receipts of *flour* have been about double those of last year; being 1,617,675 barrels, against 837,985 barrels last season; or about five times as much as was received ten years ago. The increase in *Indian corn* has been still more remarkable, the receipts this season being equal to 7,065,000 bushels, against 3,543,000 bushels last year; or more than seven times as much as was received ten years ago. The receipts of *wheat* have always presented great fluctuations; but during the past two years the increase has been immense. In 1845–6 the quantity received was more than quadruple that of any previous year; and the arrivals of the past season are more than double those of 1845–6; being equal to 1,670,000 bushels, against 808,000 bushels. In 1837–8 the receipts of this article did not amount to 5,000 bushels. Thus has closed the most important and exciting year, as regards the traffic in breadstuffs, that our country has ever seen; and our city has shared largely in the trade; standing next to New York in the amount of its exports. With regard to supplies for the coming season, there seems a probability that, what with favorable crops and increased cultivation, our country will furnish a still larger surplus for export than during the past year—particularly of Indian corn; and although the prospect of good crops throughout the countries of Europe will, if realized, render them less dependent upon foreign imports than during the season just closed, yet it is supposed that their usual home stocks are so far exhausted that there will still exist a large deficiency, to be made up principally from this country. It is not likely, however, that prices will rule as high as they have done during the greater part of the past year; though it is not improbable that, through the increase of inland and sea tonnage, and the extension of canal and railroad facilities, the average cost of transportation, both from the interior and to foreign countries, may be so far reduced as to leave the producer an ample remuneration.

The subject of HEMP has become of great importance in the commerce of the Western States and New Orleans. The following extract traces its history:

So late as the year 1841–2 the total receipts at this port from the West were only 1211 bales; as nearly the whole production was—and had been for a series of years—consumed in the interior in the manufacture of cotton bagging and rope. About this time, however, the attention of Government was directed to our home product, and measures were taken to test its applicability to naval purposes. The tests applied, under the direction of scientific men appointed for the purpose, gave highly favorable results; and the expectation of an extended market gave a stimulus to enlarged cultivation. Our first notice of the article was in our annual Statement of 1st September, 1844; when we took occasion to remark that the day was "probably not far distant when American hemp would not only supersede the use of the Russian in our own marine, but successfully compete with it in the markets of Europe." This prediction has been more speedily fulfilled than could have been anticipated, as will be seen by the fact that the receipts from the West this season have been 60,238 bales, while the imports from Russia into Boston and New York, have been less than 500 tons. Of the quantity received here 47,411 bales were exported to the North, against 24,265 bales last year, and 4,977 bales to Europe, against 6,851 bales the year previous; but notwithstanding this increase in the supply prices have averaged much higher than in any previous year; and to this fact may be attributed the falling off in the foreign export; the increased demand for home use having driven most of the European orders out of market. It may be proper here to remark, however, that the increase of receipts does not present the true ratio of increase in production; for the reason explained in our last annual statement—when we stated that high freights in the early part

of the season, and subsequently low waters in the rivers, had prevented a considerable portion of the Missouri crop from reaching market. The portion of the crop of 1846 thus detained in the interior is estimated to have been about 16,000 bales; and it is this addition to the crop of 1847 that has swelled our receipts this year to 60,238 bales; which at an average of 375 lbs. per bale is equal to about 10,000 tons. The comparative receipts, and average prices, for a series of years, will be shown by the following table:

	Bales.	Per ton.
1842–3	14,873	$80 00
1843–4	38,062	66 00
1844–5	46,274	60 00
1845–6	30,980	60 00
1846–7	60,238	90 00

We conclude with COFFEE. In our November No. 1846, we published an admirable article upon this subject, by our esteemed and talented friend, J. S. Duke Esq., of New Orleans—an article which has on many hands been highly complimented. Mr. Duke clearly showed the importance of New Orleans as a coffee mart. One passage of his paper we cannot forbear quoting:

"From the 1st January to 30th September, 1846, the imports of coffee into New York amounted to 270,520 bags, but we must consider that she receives large quantities of Mocha, Java and the finer grades of coffee, for which we have but a small consumptive demand. Every possible aspect, therefore, in which we can view this question, brings us to the conclusion that while the present imports into New Orleans follow hard upon those of New York, the day is not far distant when the former will find herself without a rival in that branch of this trade, to the employment of which her capital and energies will, for the future, be directed."

"Our market" says Mr. Littlefield "continues to attract a large and increasing share of the trade in this important article of foreign production; and the advantages which our city possesses, in its comparative proximity to the countries of growth, and the peculiar facilities for cheap transportation to the consuming markets of the West, would seem to afford assurance of a steady advancement that will ere long give it a pre-eminence over all others in this branch of foreign commerce. The *movement* of the market during the past season has been as follows:

Estimated stock out of grocers' hands on 1st Sept., 1846, of all kinds		Bags 22,000
Imports direct from Rio de Janeiro	205,111	
" " " Cuba, Laguayra, St. Domingo, &c.	43,931	249,042
Received coastwise for sale, (estimated)		41,000
Making a supply of		312,042

against a supply of 277,930 bags last year; increase 34,112 bags, nearly all of which is in the direct imports from Cuba, &c.

PROSPECTS OF NEW ORLEANS IN THE FUTURE.

A study and comparison of these tables, &c., will give the most satisfactory notions of the extraordinary stature and advances of New Orleans commercially. Nothing appears capable of disturbing the city in its approaches to the highest destiny. Railroads and canals may tap the Great Valley and bear away to Eastern markets its abundant produce; disease and death may stalk in triumph, carrying dismay into every bosom in the devoted emporium! The influences are scarcely marked. Like the waves of the ocean, successive tides roll onward. From the midst of pestilence and death, life and vitality spring up. New thousands and tens of thousands swarm into the busy mart, and ere the gloomy pall has been torn away, nothing—no vestige—is left to proclaim the trying scenes that have been enacted. The busy quays teem again—the marts are thronged—the gay shipping of all the world float their colors in the breezes, and all the West, bouyant, and vigorous, and hopeful, find in the returned SEASON OF NEW ORLEANS all that heart could wish in the great game of life! Thus is there no pause—not even a momentary paralysis—in the energies of this magnificent city.

Let us not, however, under-estimate the value of the competition with which Atlantic cities are threatening New Orleans. It is already formidable, and the beginning but hardly made. Boston and New York were sure to be at the Chicago Convention, and their influences were most remarkable. The trade of the

North-west—a region of almost unexplored wealth—was the prize, and yet New Orleans had no representative in that arena—not one to proclaim her views or her sympathies, or assert her rights! A *Massachusetts* man is made Chairman of the Executive Committee of this Convention—Hon. Abbot Lawrence; a *New York* man is to draw up its most important report—Hon. J. C. Spencer. Do not all of these things speak loudly and admonish where the sceptre is departing? We speak not of the competition of other more southern cities, though sufficiently important. If taken together they are not calculated to alarm us, they should yet instruct. Our progress, though it may not be arrested, will yet in a measure be stayed. We shall not ascend so high as otherwise. Our course ought to be clear. Let us meet this competition which is sprung upon us. Let us improve the navigation and safety of the Mississippi, and guard entirely against the many abuses which have been complained of in the levees and warehouses and commercial economy of New Orleans. The most advantageous terms should be offered to shippers, the most desirable to buyers—the least restrictions everywhere—*the best of all legislation!* A foreign import trade should be opened to supply everything which the great central regions require. All of these things need capital, energy and enterprise—most of which we have—all of which *we must have* in the great race before us.

HEALTH OF NEW ORLEANS.

One other consideration connected with New Orleans is its health. We have, on many occasions, conclusively shown the misapprehension which obtains. From the year 1840 to 1847 there was but one season when the yellow fever was regarded as epidemic and effected much mischief. One of the intermediate summers we spent in New Orleans, where perhaps not a single case of the fell destroyer occurred. In ordinary seasons it is almost unimportant, and greatly less obnoxious than many other fevers. The cautious, the prudent and the more regular classes entirely escape the danger, while the destitute and dissolute fall. In at least five of the summers alluded to it might be safely said, *the health of New Orleans was equal to that of New York, and superior to Liverpool or St. Louis.* In all of them, without the fear of successful contradiction, we assert, on an average of the year round, New Orleans exhibits as small a mortality as any other great commercial city in our country. Tables exhibiting these facts we hope to present the reader before a very long time.

Nor do we contemn the terrors of YELLOW FEVER, such as it has presented itself several times in the history of New Orleans, particularly in the past season.* The keenest remembrance and appreciation of these affect us. Our friends and companions we have been called upon to mourn, and even from the highest places has the dread destroyer torn his victims. They have fallen—the high and the low—the wealthy and the humble—the stout and the feeble—young men and tender maidens—at times almost without a mourner by the grave! This is it that is terrible in death, to die where there are no familiar and loved faces around—alone with strangers! But what can surpass the lovely charities of New Orleans, which find a brother in the most abandoned child of clay—which raise him from his destitution—which minister to his wants—which watch with tender solicitude by his dying bed, and conduct him with meet solemnities to his final resting-place. Honor, imperishable honor, to the *holy charities of New Orleans!*

The vision, however, we said, has changed with the return of a new season, and the dance of life begins again.

> "Tramp—tramp—how gaily they go,
> Ho, ho, for the merry, merry show."

Twelve months ago, almost, this day, we wrote what may well be repeated on the opening of another winter:

"Let any man mark the change within a year or two, a change even now in wondrous progress. The increase of private residences, and the neatness, elegance, and in many instances splendor, with which these are finished, evidence that something more than mere temporary abodes are intended. Our American citizens are becoming citizens indeed, and the portion of the city which they ad-

* Several reflections may be thrown into a note. The disease in New Orleans during the past summer has not much exceeded that which prevailed in Montreal from ship fever. Indeed there were several causes for the great mortality of the first named city—the arrival of emigrants and discharged volunteers from Vera Cruz being foremost among them.

minister exhibits at this time a spectacle the most surprising and gratifying. This new state of things demands much at our hands. Something higher must be aimed at than mere trade and commerce, high as these may be. *A society must be formed, social institutions promoted, literature encouraged and sustained, intelligence broadly disseminated, and a fixed and settled order of things secured.* To this we are rapidly approaching, and may the day hasten on. From our position, advantages, and prospects, the world has much to expect, and must not be disappointed.

"Let a laudable public spirit take possession of us all. We have made the first step in establishing a system of common schools unsurpassed in the Union. The next step is evident. Education must not be begun only, but completed. The people demand institutions of a higher nature—academies and colleges. The new Constitution establishes A UNIVERSITY. This we must have if *men* are to be reared. Every branch of information can be communicated by it, the useful, the elegant and the practical. A professorship of the arts, of the sciences, of law, of literature, of *agriculture*, and of COMMERCE—shall we not have these? Have we not wealthy citizens and public benefactors to endow them if that be necessary, and a liberal State legislature; or if another mode be resorted to, which would perhaps be better, and the professorships be required to sustain themselves by the attractions which they could throw around the lecture-room, as in Germany and Paris, have we not able men, and a population evidencing a disposition to be improved and enlightened?

"Do we ask why the revelry by night has been heard among us, and why so many victims have yielded to the dread delusions of vice? The answer is ever made, '*the sources of domestic and social enjoyment are so few in New Orleans.* It is impossible for strangers to find any access into society.' Let us aim then to elevate public taste and enjoyment, and to arrest the progress of the mischief we have deplored.

"Finally, let us in all things then, in the year that is before us, encourage a taste among our citizens for those that are high and ennobling in themselves, and those only that can elevate us to the position which, as a great and growing community, we should so heartily covet."

2.—COMMERCE OF CHARLESTON, 1846–47.

The exports of cotton and rice from Charleston from 1st September, 1846, to 31st August, 1847, have been as follows, as compared with the previous years:

	1847		1846	
	Cotton, bales.	Rice, casks.	Cotton, bales.	Rice, casks.
Foreign ports	179 576	89,273	160 233	54,525
Coastwise	156 064	48,658	87,841	46,090
Total	335,640	137,931	248,074	100,615

The increased exports of cotton are 87,457 bales, and of rice 37,316 casks. Of these exports there were shipped to New York:

	Rice, casks.	Cotton, bales.
1846	23,478	53,386
1847	27,191	98 542
Increase	3,723	45,156

3.—MONTGOMERY, ALABAMA.

"Everything seems to be conspiring favorably to increase the growth and prosperity of Montgomery. Rapid improvements are going on throughout the whole extent of the city. The music of the saw, hammer and trowel is heard in almost every street. Under the hands of the industrious mechanic, several large and fine buildings have sprung up almost as if by magic, while every branch of business appears to have received a new impulse. Though burdened with an expense of near $90,000 for the erection of the new State-house, the public-spirited and enterprising people of Montgomery are using every exertion to give it that importance which will render it the pride, not only of her own citizens, but of the whole people of the State. The removal of the capital to this place has contributed in no small degree to produce this interesting state of things. It has directed public attention to that point from every portion of the State, while its many advantages as a place of trade are inviting capital from all directions, and giving it a commercial importance inferior to no other city in the State, except Mobile.

It is surrounded on every side by a rich and fertile soil. Its location is healthful and beautiful, upon the great thoroughfare between New York and New Orleans, one the great commercial metropolis of the North and the other of the South. It is accessible at all seasons of the year by steamboats, connecting it directly with the trade of New Orleans and Mobile, and indirectly with the commerce of the world. Besides, the Montgomery and West Point Railroad is fast penetrating through the eastern portion of the State, opening facilities of transportation which will most assuredly secure Montgomery a very important trade from this and several of the adjoining counties, much of which has heretofore gone to Columbus and Wetumpka. Already has it reached the borders of our own populous and fertile county, affording greatly superior facilities for the transportation of their produce to the most of the farmers of this county. This road is now under thorough repair, furnished with excellent locomotives, and well fitted out with a good set of passenger and freight cars. These different channels of trade, in connection with the many advantages which it possesses from its location, fostered by that enterprising spirit which so eminently characterizes its inhabitants, is fast making Montgomery, our capital city, a place of no inconsiderable importance, while it is furnishing to the farmers of a large portion of the State an excellent and most convenient cotton market."

4.—GALVESTON, TEXAS.*

As you enter the harbor through the crooked channel, studded on both sides with shoals and breakers, the gloomy pelicans saluting you on every side, the approach is both difficult and dangerous; and, to add to the first impression, the old boiler of the steamer New York, wrecked there, seems to hold out of the water its rusty head to warn you off. Nevertheless, there is about eleven and a half feet of water on the bar, and the harbor is easily come-at-able to the initiated. The low, level and sandy, but grass-covered island of Galveston, on the north-eastern end of which the city is situated, is about thirty miles long, and has on it but three small groups of native trees, though of fruit trees there are plenty in the city, planted by its inhabitants. It is tolerably fertile, and owing principally to the industry of the German emigrants that have settled there, garden sauce of all kinds abounds. It is also healthy for all but those who, unacquainted with the peculiarities of the climate, expose themselves to the hot mid-day summer sun, and thereby bring on attacks of the fever. It is, however, considered, with the majority of judges, to be more healthy at any season than New Orleans. Galveston bay is about 60 miles long and 35 wide; in its deepest parts there are about 12 feet of water. On its greatest unavoidable shoals there is about three feet. There are various islands in different parts of it; the largest is "Pelican," opposite the city of Galveston. This is, from one extremity to the other, about four miles long, and is to Galveston what Coney is to New York. It is destitute of timber, as are all the islands on the coast; nevertheless, it is, during the spring season, a great resort. Some visit for the purpose of making pic-nics or chowders—for the last it is famous; others go for the sail, but most for the purpose of gathering the myriads of eggs deposited by gulls and other aquatic birds. It is supposed by some that the "margin channel" will gradually fill up and join Galveston island to the main-land. There is one reason in this, for the channel called "Bolivar," running between "Pelican" and the main-land, has visibly increased in depth within the last year, and a tooth or point of "Pelican," called the "Spit," has increased toward Galveston in proportion. Should this happen, the city would be transferred to "Bolivar Point" on the main-land, a few miles from its present site, as the untiring spirit of speculation, which is so prominent a characteristic of the citizens of Galveston, would, under any transformation which could possibly take place, maintain a depot as a link between the great inland navigation falling into Galveston bay and the sea.

The inhabitants of Galveston are decidedly intellectual. Their inherited independence is renovated as it were, and the spirit of improvement is making the most rapid strides both in regard to their political and social position. The streets are wide and straight, but their cleanliness is about on a par with New York, which is no compliment. One ameliorating item in this is, they are not obliged to pay for *not* having it attended to, like the New Yorkers. Galveston is, particularly in the winter season, a lively place, plenty of balls, concerts, &c., and the society is by no means poor.

* Correspondent New York Sun.

5.—COMMERCE OF BOSTON, 1846–47.

We extract from the Shipping List the following comparative statement of the imports at Boston, from 1st Sept. 1846, to 1st Sept. 1847, and a corresponding period in 1845 and 1846:

	1846-7.	1845-6.		1846-7.	1845-6.
Coffee.....bags	220,057	233,597	Flour.....bbls.	842 523	847,753
" ....piculs	10,700	10 200	Corn....bushels	1,810 546	144,724
Coal..... tons	227,678½	180,996	Oats..... "	562,804	523 039
" ..chaldrons	842	72	Rye..... "	63,758	28 580
" .....bushels	126,800	173,029	Shorts... "	82,427	81,571
Cotton.....bales	222,076	196,031	Hemp.....tons	505½	181
Lemons...boxes	35,743	43,777	" .....bales	41,266	33 247
Oranges... "	61,496	60,042	Hides...number	332,848	406,240
Figs.....drums	209,869	182,216	Lead .....pigs	131,793	155,872
" .....cases	340	....	Molasses..hhds.	79,537	70,584
Raisins....casks	26,074	24,693	" tierces	4,490	3,836
" ...drums	4,368	2,612	" barrels	1,571	1,139
" ... boxes	142,868	122,531	Linseed....bags	50,959	92,002
Codfish...drums	4,162	7,789	Sugar.....hhds.	9,766	7,743
" .....qtls.	1,655	3,348	" .....bbls.	8,765	7,399
" ....boxes	133 984	93,338	" .....boxes	69,159	55,121
Mackerel...bbls.	82,919	69,270	" .....bags	36,554	71,224
Herring...boxes	32,049	26,814			

RESOURCES. AGRICULTURE, TRADE, &c., OF THE STATES.

I.—MINERAL RESOURCES OF ALABAMA.

FROM the late scientific survey of Prof. Tuomey, we introduce a few passages showing the immense field of new enterprise in Alabama:

"The thickness of the coal measures, between Tuscaloosa and the highest point at which I have observed them, probably does not exceed 250 or 300 feet, and in this there are included at least ten beds of coal, varying in thickness from one to four feet; of these, *three at least are workable beds*—that is, beds in which a man can work under ground, and extract the coal without removing the shale or overlying rock.

"It is a common mistake with persons unacquainted with practical mining, to suppose that the value of a coal bed increases with its thickness; it is never desirable that it should exceed six feet, and four feet is quite a convenient thickness. When two beds are separated by a seam of shale, it is taken out with the coal, and both are worked at once. It must be borne in mind, that my observations have been altogether confined to natural exposures and sections, and that, consequently, future explorations, particularly by boring, may bring to light more numerous and thicker beds, but they cannot fall short of what I have indicated.

"Two facts of great practical importance, connected with the working of the Tuscaloosa coal-field, deserve notice: one, the entire absence of all those disturbing causes so productive of fruitless labor and expense in coal mines, and in mining language significantly termed 'troubles'—I have not seen, and I looked for them with care, a single dislocation or a trap dyke throughout the region that I examined; the other, that the strata dip toward the valley of the river, and hence favors the thorough drainage of the coal.

"I found, at several localities that I examined, a sufficient quantity of clay ironstone, or argillaceous iron ore, to give assurance that farther examination will bring to light beds of this valuable ore of sufficient extent to be worked profitably. Although on an average not yielding more than 30 per cent. of iron, yet it is almost the only ore used in England.

"About three miles north of Lexington I examined a spring of sulphuretted water, very similar to Windham's Springs, on the Warrior, which may prove worthy of the attention of the medical faculty of the county.

"There are some quarries of flagging stones on North river that deserve notice. On Binion's creek a fine ledge occurs which has been worked to a sufficient extent to exhibit the excellent quality of the flag-stones, which are disposed in horizontal layers, varying in thickness from one to six inches.

"Throughout the coal measures numerous localities of millstone grit are found, at some of which millstones have been procured.

"Higher up there is a white silicious rock, resembling the Esopus stone, that is said to make excellent millstones.

"On the right bank of North river I examined a noted locality of sulphate of magnesia. The salt is found lining the fissures, and between the laminæ of the slates, and not, as I had imagined, the result of the disintegration of the rock. An incrustation of fibrous gypsum is found associated with it, which, as well as the magnesia, must have been left by water which once percolated through these rocks.

"I regretted to perceive lingering hopes of finding veins of lead, and even of the precious metals, among the people of this region."

2.—PROSPECTS OF AMERICAN AGRICULTURE.

The lamented Hon. Silas Wright, in his address prepared for the New York State Agricultural Convention, has the following reference to our farming interests, which is so wise that we cannot forbear its insertion:

"Does any one believe that, for generations yet to come, the agricultural operations of the United States are to be circumscribed within narrower comparative limits than the present, or that the agricultural productions of the country are to bear a less ratio to our population and consumption than they now do? I cannot suppose that any citizen, who has given his attention to the considerations which have been suggested, finds himself able to adopt either of these opinions. On the contrary, I think a fair examination must satisfy every mind that our agricultural surplus, for an indefinite future period, must increase much more rapidly than our population and the demand for domestic consumption. This, I believe, would be true without the efforts of associations such as this to improve our agriculture. The condition of the country, and the inclination and preference of our population for agricultural pursuits, would render this result unavoidable; and if this be so, when the impetus given to agricultural production by the improvements of the day; the individual and associated efforts constantly making to push forward these improvements with an accelerated movement; the mass of educated mind turned to scientific researches in aid of agricultural labor; the dawning of a systematic and universal agricultural education; and the immense bodies of cheap, and fresh, and fertile lands, which invite the application of an improved agriculture, are added to the account, who can measure the extent or duration of our agricultural surplus, or doubt the soundness of the conclusion, that the export trade must exercise a great influence upon the market for the agricultural productions of the country for a long series of years to come?

"Such is the connection now between our agricultural and the export trade and foreign market; and these relations are to be extended and strengthened, rather than circumscribed and weakened, by our agricultural advances. The consumption of the country is far short of its production, and cannot become equal to it within any calculable period. On the contrary, the excess of production is to increase with the increase of population and settlement, and the improvements in agriculture and agricultural education. These appear to me to be facts, arising from the condition of our country, and the tastes and inclinations of our people, fixed beyond the power of change, and to which theories and principles of political economy must be conformed, to be made practically applicable to us."

3.—ENGLAND'S NOTIONS OF SUGAR AND COTTON CULTURE—AUSTRALIA.

The London Atlas, in a review of Dr. Lang's work published a few months ago, entitled "Cooksland in North-eastern Australia, *the future cotton field of Great Britain*," remarks:

"The Australian region, hitherto known as Port Philip, appears by Dr. Lang's account to hold out quite a new field for the enterprise of emigrants, and it is his avowed object in these volumes to recommend it for the cultivation, by European free labor, of sugar, cotton, and other tropical productions. The climate, though warm, is said to be far more healthful and agreeable to Europeans than that of any other British colony in an equally low latitude; so much so that many settlers experience no difficulty in working nearly the whole day in the open air. Though free from the excess of moisture, often so dangerous in conjunction with the heat of the tropics, it is extremely well-watered, being intersected by lofty

mountains whose peaks shoot up to a height of five or six thousand feet, and are occasionally covered with snow; and thence descend numerous brooks, clear as crystal, and delightfully cool, which cover the whole country with a net-work of streams, frequently large enough to deserve the name of rivers.

"At Brisbane town—a settlement already made on the bay—Dr. Lang first saw the cotton plants, which suggested the idea of the capabilities of the soil and climate for productions of this nature. They were growing in the garden of a Dr. Ballow, the colonial surgeon, and though little attention had been paid to them, as they were regarded merely as objects of curiosity, they were remarkably healthy and vigorous—the branches covered with pods filled with cotton of snowy whiteness, and apparently of superior quality. The plant has actually, it appears, been found growing wild on some of the islands off the north-east coast; and some specimens since grown casually in a garden on the Brisbane river have been submitted to the judgment of a mercantile house in Glasgow, of long experience in the cotton trade, and have obtained from it the following certificate:

"*Glasgow, 15th April*, 1847.

"DEAR SIR—We have examined the small sample of cotton wool from Australia, carefully, and give it as our opinion, that if quantity could be produced, it is a very valuable kind, and would, in the present state of the market, readily sell at from 11d. to 12d. per lb., say eleven pence to one shilling per pound. It is clean in color, fine-stapled, but rather weak, which by care taken in cultivation, might be much improved.

"We remain, dear sir, yours most sincerely,

"JAMES & JOHN WRIGHT.

"William McBryde, Esq."

"It appears, therefore, that cotton of a most valuable description, equal to much of the Sea island from Georgia, in the United States, can be grown with perfect facility in the territory of Cooksland, in Australia. It is unnecessary to inform the reader how peculiarly interesting and important such a circumstance must necessarily be at the present moment, not only from the brilliant prospects which it holds forth for the future colony of Cooksland, in insuring remunerative employment to any conceivable extent for myriads of an industrious free emigrant population to inhabit the beautiful country I have been describing, but from its evident bearings on the question of an adequate supply of raw material for the manufactures of Britain, and on the still higher question of the rights and interests of humanity. It is well known that there has been a feverish feeling generally prevalent for some time past in the cotton trade, from an apprehension of an insufficient supply of the raw material for the rapidly extending manufactures both of this country and of the continent of Europe."

This may turn out to be a momentous suggestion for our American planters. The sugar-cane, too, grows luxuriantly, and the growth and manufacture of sugar appear to hold out very flattering prospects to future enterprise in this country. Dr. Lang is of opinion also that the separation of the cultivation of the cane from the manufacture of the sugar would be both practicable and desirable:

"There is a very prevalent idea, however, in England, that the cultivation of the sugar-cane and the manufacture of sugar must always be conjoined and carried on by the same persons, and that as this can only be effected by means of an extensive combination of labor, and the investment of a large amount of capital in the requisite buildings and machinery, it is a branch of business that can only be pursued successfully either in connection with the system of slavery, or when the party engaged in it has a large capital to expend in the employment of free labor. But this idea has arisen entirely from the long prevalence of the vile system of slavery in our West India colonies; for it appears to me that there can be no better reason assigned why the colonial farmer who cultivates the sugar-cane should also be able to superintend and conduct the delicate chemical processes of a sugar-manufactory, so as to monopolize in his own person both of these very different and distinct branches of business, than there can be for requiring the British corn-grower to be also a miller and a baker, or the British flax-grower to be also a flax-dresser and a weaver. Nay, as the operation of transforming the rich juice of the cane into sugar is a chemical process requiring the utmost tact and long experience to insure its success, while the operations of grinding and weaving are merely mechanical, it seems to me pre-eminently absurd to identify the cultivator and the manufacturer in the one case, and to keep them distinct in the other. No doubt, when a planter had three or four hundred negro slaves on his

estate, it was desirable, in order to keep these slaves constantly employed, to transform the farm, every season after the crop had been got in, into a manufactory; but the combination of the two distinct branches of business is contrary to the first principles of political economy, and to the uniform practice in every department of industry in the mother country.

"If the West India system of combining the cultivation of the cane with the manufacturing processes implied in the conversion of its juices into sugar, were absolutely necessary to the production of that commodity, I should scarcely recommend the cultivation of the cane at Moreton Bay, as the prospect of deriving any profit from the investment of so large a capital, and the maintenance of so extensive an establishment as this speculation would imply, would be very precarious. But if an establishment were to be formed for the manufacture of sugar in a central situation in the district, to be conducted by persons thoroughly acquainted with the process, and making it their exclusive business (purchasing the canes from the farmers, either at the boiling-house or in the field), I am confident the speculation would prove highly remunerative to all concerned. In that case every small farmer could have his cane-patch (to use the appropriate phrase of the West Indies), as well as his portion of ground under maize, wheat, or sweet potatoes, and there would be just as little difficulty in disposing of the cane to advantage as there is at present in disposing of the wheat or the maize; for if the sugar manufacturer did not give the colonial farmer a fair price for his canes, an opposition concern would very soon be got up to insure justice to the cultivator."

4.—TURPENTINE BUSINESS OF NORTH CAROLINA.

Statistical information in regard to the products and commerce of this State is exceedingly difficult to obtain; consequently all attempts at an estimate must be defective; but yet attempted estimates of an article which forms so important an item in the labor and wealth of Eastern Carolina as turpentine, cannot fail to be interesting, even should they fall below the truth, or in some degree rise above it; and they may possibly lead to good results. It is certainly very desirable that we should have some acquaintance with the resources of the State and the extent of her products, which our present means of information very partially furnish.

Few persons, perhaps, unconnected with the commercial transactions now carried on in this State in the single article of turpentine, can form an idea of the quantity annually made in our limits, the amount of labor employed in its manufacture, the large capital invested, the large number supported by it, and the various uses to which it is appropriated. Nor are we prepared to enlighten them fully upon the subject, because of the necessarily limited information which even dealers in the article possess, in reference to it. In our conversation with intelligent gentlemen engaged in the business, we have been enabled to gather up some particulars, however, which may be interesting.

We find the impression to be, that about 800,000 barrels of turpentine are now annually made in this State. Not more than 200,000 barrels, if that, were shipped to New York and other ports the past year in its crude state, and the largest portion of the whole being distilled in this State. The estimated value to the makers is about $1,700,000 annually, and may be $2,000,000. About 4 or 5,000 laborers are engaged in making it, and perhaps three times as many more human beings are supported mainly from the proceeds of its first sale. The distillation of turpentine in this State is now carried on very extensively, which will render the shipment of it in its crude state very small in future. It is supposed that there are now in operation about 150 stills, which at the average cost of $1,500 with fixtures, shows that there is an expenditure of $225,000 to begin with in the distilling of spirits of turpentine. This number of stills, to have steady work, would require 900,000 barrels, annually—more than is now made; which to us is an indication that the distilling business is overdone. Should the makers of the article continue to multiply stills, and thus monopolize the distilling, as well as the making, it will be necessary for those now engaged in it to invest their capital in other pursuits. The cost of distilling is very great, and when we reckon the cost of transportation, the profits of distillers, of ship owners, commission merchants, and the venders of the article abroad, it will be seen that the capital and labor employed is not only immense, but the numbers who are supported by the manufacture and sale of the article is astonishing. Perhaps there is no one article produced in this country by the same number of laborers, which contributes so much to the commerce and prosperity of the country, as the article of turpentine.—*Newbernian.*

5.—IRON AND RAILROADS IN TENNESSEE.

Mr. Morgan, in his report to the legislature, estimates the capital employed in the business at $4,100,000, and the annual products at the same amount. Three-fourths of this capital is employed in Middle Tennessee, and would contribute to the support of the Nashville and Chattanooga railroad. On the Cumberland river, near Nashville, there are "21 blast furnaces, 11 forges, and 3 splendid rolling-mills, which yield annually about $800,000." On the Tennessee river, "there are 12 furnaces and 8 forges and bloomeries, which produce about 180,000 tons annually." East Tennessee is particularly rich in iron ore, water power, and fuel of every kind. At present, the products of their mines and furnaces are carried down the Tennessee, over the Muscle shoals, thence to the Ohio, and up that river to Pittsburgh, where they are manufactured and returned to the South for consumption! At Chattanooga we are informed that pig iron can now be purchased for $13 per ton, while it commands in Savannah something like $27. The moment the Georgia improvements reach the Tennessee, the whole trade of the country bordering upon that river and its tributaries above Chattanooga, will be turned toward the Atlantic. The iron, the corn, the flour, the fruit, the tobacco, the hemp, and the thousand other products of that region will swell the trade of our State works to at least double, perhaps tenfold, what it is at present. Iron, for instance, could then be brought from Chattanooga to Macon, commissions included, for about the same freight now paid from Savannah, say 30 cents per cwt., which would give it to the people of Macon and the planters of Middle Georgia at a little over two-thirds the price now paid.

According to an able letter addressed by V. K. Stevenson, Esq., to the Hon. John C. Calhoun, we are surprised to learn that the agricultural products of Tennessee are in value, equal to $57,551,820; while those of Ohio, are only $57,899,394; and of New York, $57,685,400; showing Tennessee to be the third State in the Union in productive wealth. According to the same authority, the annual value of all kinds of agricultural and manufactured articles produced in the immediate vicinity of the proposed railroad between Chattanooga and Nashville, amounts to $12,642,576. And yet in the items enumerated, we find Mr. S. has entirely omitted the article of wheat, of which Tennessee produces 8,340,000 bushels per year—nearly one-half of which is grown in the Cumberland valley.*

6.—RAILROAD TO TENNESSEE RIVER.

It is estimated that the income of the road the present year, will be something like $75,000; and a gentleman who is familiar with the trade of the Tennessee river, informs me that he can prove that this income will reach $250,000, the first year after the road is completed to the river, whether at Chattanooga, or any other point. He has recently been on a tour through Middle Tennessee, and has conversed extensively with the capitalists there, and assures me there will be no difficulty in raising the $3,000 000 necessary for the completion of the road to Nashville. Roads are also in contemplation from Nashville to Louisville, Ky., from Nashville to the mouth of the Ohio, and from Nashville, north to a point at or near the mouth of the Wabash river; thus connecting our great work with the principal improvements in the States of Tennessee, Kentucky, Indiana, Illinois, and Missouri, and opening the entire valley of the Mississippi to the Southern Atlantic ports!!

But even admitting that the road should never extend a foot beyond the Tennessee, what may we not expect from the outlay of a few thousand dollars for its construction to that point?

In the first place, the Tennessee below Chattanooga, a distance of 175 miles, is navigable to the mouth of the Elk. From this point, steamboats can ascend Elk river sixty-eight miles in the direction of Nashville. The country bordering these rivers, produces from 60 000 to 75,000 bales of cotton, two-thirds of which would pass to the Atlantic markets. Above Chattanooga we have the Little Tennessee, the Holston, the Clinch, the French Broad, the Hiwassee, the Nolechucky, the Big Pigeon, and the Emory rivers, which, combined, have a navigation of over 1000 miles. The country bordering these rivers is rich in agricultural and mineral products. On the borders of the streams are some twenty-seven furnaces, the iron from which has hitherto been transported all the way to Pittsburgh, at an immense cost. The trade from all this region, in case the road were completed,

* Macon Journal and Messenger.

would at once force its way to the Atlantic ports. Under such circumstances, who can doubt the correctness of the estimate in regard to the probable income of the work, or who would hesitate to urge forward its early completion?

7.—RAILROAD FROM TUSCALOOSA TO CHARLESTON.

A Tuscaloosa paper remarks—"There is, as we have shown, a distance of ninety miles to be overcome, between Tuscaloosa and the Coosa river, to effect an expeditious and cheap communication between the regions lying around Tuscaloosa and the seaboard at Charleston. Over this distance, we are sure a railway can be built, with a very small outlay of money. We have carefully examined into the history of railway enterprise in Europe and this country; and are warranted in saying, that the great difficulty to be encountered, is the expense arising from the crossing of very large streams, and the value of lands within the routes chosen. The ninety miles over which this railway would run, embraces portions of the counties of Tuscaloosa, Jefferson, and St. Clair. After leaving the hills lying between Tuscaloosa and Jonesboro, some forty miles, it would run over a country so level as to require scarcely any grading whatever. There are no large water courses to pass, and we venture the assertion, that the lands necessary for the purposes of the railway, would be given without one cent of assessment, so well satisfied are the inhabitants of its value to the country."

8.—SHEEP HUSBANDRY IN THE WEST.

The American Institute of New York has lately been addressing itself more particularly to wool, and we had the happiness a few days ago to be present during one of the discussions of the Farmers' Club, upon the subject. The matter presented was meagre in consequence of the absence of Mr. Fleishman, from whom much that was interesting was expected. Mr. Fleishman, under the directions of the Patent Office, collected a quantity of material in Europe, upon sheep and wool, which he informs us will, in all probability, be published very soon, either by the Patent Office, or in a volume on his own account. We examined his specimens of wool, which are most beautiful, and the various drawings of his cabinet.

The National Intelligencer and Farmers' Library have both been publishing interesting material upon sheep, as also the Cincinnati Gazette. Hitherto the North has monopolized this business, but recent experiments demonstrate that it will succeed with great profit in the Southern States. Indeed, we know a large planter in Louisiana, who realizes a sufficiency to defray the expenses of the household, from the sheep which are attended by one old woman, at no cost whatever to him—this, without regarding the value of the lambs and mutton. Indeed, there is reason for this, as there the sheep may feed out both summer and winter, and lands suitable for them exist in great abundance, and greatly less in cost than land in the Northern States. "We are informed," says the Gazette, "that some few years past attention was directed to the hills and valleys of the Ohio, in Kentucky; and on careful examination, large bodies of land were found which were but little used, of very low price, and were deemed much better suited to the business of sheep husbandry than those lands where it was most exclusively carried on, farther North. The climate was found so comparatively mild, as that the sheep would require but little or no care in winter: the soil was covered with a luxuriant growth of grass and vines nearly all the year, and protected from the winds and weather by trees." After this success, large flocks of sheep were driven there from Vermont, and lands are being constantly bought for the purpose. For these, as low as $2 an acre have been paid, the lands abandoned at the North being sold for $25 or $30 per acre. Thus is Ohio likely to become a great wool-growing region.

9.—FORESTS.

From the Edinburgh New Philosophical Journal.

In general, the deciduous or hard-wood trees prevail on intervale ground, fertile uplands, and the flanks and summits of stately and trappean hills; while swamps, the less fertile, and lightest upland soils and granite hills are chiefly occupied by coniferous trees. These woods perish by the axe and by fire. Forest fires have not been confined to the period of European occupation. Indian traditions tell of extensive ancient conflagrations. In dry weather, the mossy vegetable soil much resembles peat, burns easily and rapidly—and on this depends the

propagation of fires, in a great measure—the only exception being when the burning of groves of the resinous coniferous trees is assisted by winds, causing the flames to stream through their tops more rapidly than it can pass along the ground. In such cases, some of the grandest scenes ever shown by forests occur. Swamp tracts are more secure from fire. In old forests, when the trees have attained great age—are beginning to decay—much moss grown—much dead wood and dry wood—they are more readily destroyed by fire. And we should regard fires arising from natural or accidental causes, as the ordinary and natural agents for the removal of worn-out forests. The great fire of 1825, near the river Miramichi, in New Brunswick, devastated a region of 100 miles long by 50 broad; many persons and cattle, and innumerable wild animals perished in that conflagration. Such fires leave scorched trees, which soon furnish food for other fires, and ultimately there is what is termed a barren. Such is the fate of large districts in Nova Scotia and the neighboring provinces. Mr. Smith, Secretary of the Board of Agriculture of Nova Scotia, says: If an acre or two be cut down in the midst of a forest, and then neglected, it will soon be occupied by a growth similar to that cut down; but when all the timber, or tracts of great size, are killed by fires (except certain parts of swamps), a very different growth springs up—at first, a great number of herbs and shrubs, which did not grow on the land when covered with forest. The turfy coat of the land, filled with the decaying fibres of the roots and plants of the forest, now all killed by the fire, becomes a kind of hot-bed, and seeds which had lain dormant for centuries, spring up and flourish in the mellow soil. On the most barren portions, the blue berry appears almost everywhere. Great fields of red raspberries, and fire-weed or French willow, spring up along the edges of the beach and hemlock land, and abundance of red-berried elder and wild red cherry appear soon after. But in a few years, the raspberries and most of the herbage disappear, and are followed by a growth of firs, white and yellow birch and poplar. When a succession of fires have occurred, small shrubs occupy the barren; the kalmia or sheep-poison being most abundant, in the course of ten or twelve years forms so much turf that a thicket of small alder begins to grow, under the shelter of which, fir, spruce, harmetac (larch), and white birch spring up. When the ground is thoroughly shaded by a thicket 25 feet high, *the species which originally occupied the ground begins to prevail!* and to suffocate the wood which sheltered it. And within sixty years this land will generally be covered with the young growth of the *same kind it produced of old!* Mr. Dawson attributes to birds the rapid distribution of the seeds of edible plants of all sorts.

After various growths the ancient forest is renewed; trees of the longest growth prevail over all others. Animals are adapted to all their changes—some species disappear before cultivation, others increase with it.

10.—SEA ISLAND COTTON.

This finest of all the varieties of cotton cultivated in the world, it is known, is almost exclusively the product of the islands which stretch along the coast between Charleston and Savannah. The Hon. Whitmarsh Seabrook, in an essay or memoir lately prepared upon the subject, as an appendix to his valuable paper some years ago, examines its history, cultivation, trade, &c.

"The long-staple or black-seed cotton is cultivated in South Carolina to the distance of about thirty miles from the ocean. Of the raw material there are three distinct qualities, designated in the markets as Sea islands, Mains, and Santees. The first, a pound of the finest of which, manufactured into the finest lace, is now worth from 8 to 15 guineas, and has been sold as high as 100 guineas, is the most valuable grown in any part of the world for exportation. Of descriptions of the plant reared on the sea-shore, the number is probably much greater than any examinations have yet disclosed. At present we are acquainted with only ten or fifteen varieties. These are distinguishable by certain criteria well known to the observant cultivator, but frequently the eye, unguided by the lights of botany, is unable to detect a difference, until the harvest itself shows the existence of perhaps a very material one. Invariably, fecundity in the plant is counterbalanced by defectiveness in the quality of the fruit; on the contrary, the better the fibre, the smaller is the harvest. This is in conformity with the wisdom of Nature as displayed in all her works. From analogical reasoning alone it may indeed be inferred, that our continued efforts to discover a plant, combining productiveness with superiority of staple, in as high a degree as these properties are separately found in many species of cotton, are utterly hopeless.

"From the time when long cotton was first introduced into this State, to within a recent date, its cultivation was decidedly profitable. Now legal interest on the capital of the grower is rarely ever realized. From 1821 to 1830 inclusive, the aggregate crop was 107,294,930 lbs. In the ten succeeding years it was only 79,041,596 lbs., being a deficit of 28,253,334 lbs. The average annual product from 1805 to 1817, a period of nine years, excluding the four years of the embargo and the war, was greater by 797,033 lbs. than it has been for the last nine years, or since 1832. Although the number of acres at this time in tilth cannot with accuracy be stated, yet it is believed that it is at least one-third greater than it was in 1820, or twice that of 1804. Under the operation, therefore, of decreased and decreasing exports, with a vast augmented population in every part of the world—extraordinary improvements in machinery—greater skill and cheapness in spinning and weaving—lower duties on the importation, and the superior properties of the kinds at present raised, the value of long staple cotton is less now than it was thirty-five years ago.

"Until lately, the sea island crop has been confined exclusively to high grounds, as contradistinguished from the marshes. The sagacity and perseverance of two members of the Agricultural Society of St. John's, Colleton, have been instrumental in effecting a change on this head, the ultimate consequences of which it is not easy to predict. There is no soil in South Carolina, if sown in long cotton, that will yield more money in a series of years, than those immense tracts which lie about the points where the salt and fresh waters meet. Nearer to the ocean, the land is low, intersected by numerous small creeks, and too salt for immediate use. Above the line, the total absence of saline ingredients renders the ground fitter for grain, especially rice, than cotton. Of the kind just noticed, there are thousands of acres in the parishes washed by the Atlantic, which to their owners are now barren wastes. This is the great prairie region of the lower country, capable of itself, from its inexhaustible fertility, of producing as much fine cotton as the demands of trade will probably require for a quarter of a century. As these marshes are very level, numerous ditches are required. If this work be faithfully done, such is the richness of the soil, that whether grown on beds or not, the crop, even the first year, will abundantly repay the labors of the cultivator.

"Within three years, other agents than that of human power have been resorted to in separating the seed from cotton. At this time a few planters still depend on the common treadle-gin, but the propeller is steam; others use another machine, distinguishable from the foot-gin chiefly in the length of the roller, to which steam or horse-power is applied. The former produces only about twice the quantity of cotton as the treadle gin when the human foot is employed. Its advantages, therefore, when the outlay and incidental expenses are brought to view, are inconsiderable. The latter gives generally about 200 lbs. per day. On the debit side the items do not substract materially from the interest of the capital employed. The objections to Farris' gin are: first, that it works irregularly, and that unless the adjustment of the parts to the whole be entirely true, no calculations as to its performance can be made; and, secondly, that from the rapidity of the motion, which, for a profitable daily yield, must be kept up, the staple of the cotton is injured. The first disadvantage is undeniably a strong one, but the last is at least problematical. Steam applied to Farris' gin has so far afforded more satisfaction than any other scheme of accomplishing the object of the planter yet tried. It is, however, certain, that a machine for detaching the seed from sea island cotton, without impairing some of its valuable properties, is still a desideratum; and as large expenditures of money and labor have been fuitlessly made in this and other countries to attain an end so desirable to the grower, the task may be pronounced embarrassing and full of difficulties. If, nevertheless, the labor of ginning cotton cannot be essentially abridged, mechanical aid could and ought to be made subservient to the preparing of it for the gin, for the bag, and for packing it. In reference to the last operation, why is not the screw used? This mechanical agent is equal to the power of about twenty men; in other words, with one boy and a mule, it can do in a day as much as twenty men can accomplish in the same time with the pestle. As the pressure of the screw is equal and regular, no damage whatever to the staple can ensue from its action; on the contrary, the repeated blows of the pestle, always of a wedge-like shape, must in some degree operate injuriously. As it is believed that the ship-owners give a decided preference to the square over the round bale, if there be no weighty objections on the part of the manufacturer, which can easily be ascertained, the

planter would consult his interest by substituting the screw for the present clumsy instrument for packing cotton."

EXPORTS SEA ISLAND COTTON, FROM 1805 TO 1842.*

Year.	Quantity.	Year.	Quantity.	
1805	8,787,659 lbs.	1813	4,134,849 lbs	War.
1806	6,096,082	1814	2,520,388	War.
1807	8,926,011	1815	7,449,951	
1808	949,051—Embargo.	1816	9,900,326	
1809	8,664,213	1817	8,101,880	
1810	8,604,078	1818	3,080,838	From S. C. only.
1811	8,029,576	1819	3,442,186	From S. C. only.
1812	4,367,806—War.	1820	6,020,101	From S. C. only.

Year.	Quantity.	Price.	Average.
1821	11,344,066	12½ to 30*d*.	21¼*d*.
1822	11,250,635	10 to 28*d*.	19
1823	12,136,688	11 to 24*d*.	17½
1824	9,525,722	11¼ to 27*d*.	19¼
1825	9,655,278	15 to 42*d*.	28½
1826	5,972,852	10 to 30*d*.	20
1827	15,140,798	9¾ to 20*d*.	14¾
1828	11,288,419	10 to 22*d*.	16
1829	12,833,307	9 to 21*d*.	15
1830	8,147,165	11¼ to 20*d*.	16
1831	8,311,762	9½ to 18*d*.	13¾
1832	8,743,373	9½ to 18*d*.	13¾
1833	11,142,987	10½ to 22*d*.	16¼
1834	8,085,935	13½ to 26*d*.	19¾
1835	7,752,736	14 to 33*d*.	24½
1836	8,554,419	14 to 36*d*.	25*d*.
1837	5,286,340	12 to 40*d*.	26*d*.
1838	7,286,340		
1839	5,107,404		
1840	8,770,669		
1841	6,400,000—20,000 bags, at 320 lbs. each.		

DOMESTIC MANUFACTURES.

1.—MANUFACTURE OF FLAX IN ENGLAND AND THE UNITED STATES.

THE question having come up before the Farmers' Club, of New York, for discussion during our visit in that city, we attended. From a paper read by Mr. Meigs, it appears that there was manufactured in Ireland, in

1710	1,688,574 yards.	1820	43,613,218 yards.
1750	11,200,771 "	1825	55,113,265 "
1775	21,502,000 "	1835	60,916,592 "
1800	35,676,901 "		

Imports into the United Kingdom in 1845, from foreign countries:

Fibre.—79,424 tons, worth twenty millions of dollars.

Flax Seed.—Nearly five millions of bushels, worth about twenty-seven millions of dollars.

Oil Cake.—85,890 tons, worth over three millions of dollars.

Total.—Fifty millions of dollars.

Previous to 1825, linen was made from hand-spun yarn. In 1839, there were in operation forty flax spinning-mills, using steam power of about two thousand horses.

In the United Kingdom, there were, in 1845, 414 linen factories, of 12,000 horse power, 48,000 persons, and capital sixty millions of dollars. Three mills consume annually 110,000 tons of flax.

* Those of subsequent years will be given hereafter. For other valuable information on the subject, see Commercial Review, vol. 1, 1846.

ROCKY MOUNTAIN FLAX.

"Mr. Parker in his excellent narrative of his journey across the Rocky mountains, from the Mississippi to the Pacific, says, 'Flax is a spontaneous production of this country. In everything, except that it is perennial, it resembles the flax that is cultivated in the United States—the stalk, the boll, the seed, the blue flower, closed in the daytime and open in the evening and morning. The Indians use it in making fishing nets. Fields of this flax might be managed by the husbandman in the same manner as meadows for hay. It would need to be mowed like grass; for the roots are too large, and run too deep in the earth, to be pulled as ours is; and an advantage that this would have is, that there would be a saving of plowing and sowing.' This was on a branch of Lewi, or Snake river of the Columbia."

2.—MANUFACTURE OF PAPER IN THE UNITED STATES.

We have, on a previous occasion, adverted to the importance of this branch of our industry, so rapidly being carried to perfection in our country. In 1846, the capital employed in the manufacture was estimated at $18,000,000. There were 700 mills, producing annually $17,000,000 in paper, and employing 100,000 persons of all ages. Cost of stock used, viz., rags, old rope, waste cotton, etc., $8,000,000, without reference to the quantity of soda, pearl and pot-ash, coloring matter, coal, iron, wood, oil, sizing, etc., valued at $2,000,000 more. Wages of workmen in the business, $6 to $9 per week.

In reference to writing paper, Mr. Cist, of Cincinnati, publishes some curious particulars:

Cap, as applied to paper, is of modern use entirely, at least in certain parts of the United States. Not more than 30 years since I was familiar with the phrase foolscap, and I distinctly recollect how "cap," its abbreviation, grated on my ear, upon first hearing it, as much so as "pike," for turnpike, does yet.

The question is thus shifted to what is the origin of the phrase foolscap, as applied to writing paper, which has borne this name so long, that its origin is lost to most persons.

The kings of England, from Edward I., if not earlier, granted various monopolies, either for the support of the government, or to enrich favorites. One of these was the exclusive right to manufacture paper granted by the first Charles. On the finer kinds, as a species of notice of the monopoly, the royal arms of England formed the water-mark. Vast sums were of course made upon this exclusive privilege to make and vend an article in such general use.

All these monopolies were swept away by the parliament which brought Charles to the scaffold; and in this particular case, by way of showing their contempt for the monarch, they directed the royal arms to be taken from the paper, as they had already been from sign-posts, public halls, &c., substituting a fool, with his cap and bells, as the effigy. This was done in 1649.

Most of the manuscripts written between that period and 1660 bear, accordingly, as a water-mark, a fool wearing the dress described as his costume in the court of the British monarchs. Cromwell, when made Lord Protector, changed the water-mark by substituting a dragon, grasping in his claws arrows of fire, and afterward putting his coat of arms in its place. This still occasionally appears.

Charles II., at the Restoration, replaced the royal arms, and enlarged the size of the sheet, which was much smaller than we see in modern days.

In England, paper of the size which the Rump Parliament ordered for their journals, bearing the foolscap effigy, is still in existence; and the title, as in many other things, is still retained for ordinary writing-paper, centuries after the reason for it has ceased, and now serves, as it will serve for ages, to designate all writing paper in ordinary use, as distinguished from paper designed to be folded in the form of letters.

This last class of writing paper has been reduced greatly in length and widened somewhat to adapt it for a convenient shape in folding, and still bears its original name of post paper, applied to it from the mail or post by which letters were conveyed to their address.

So recently has the United States made its own paper, that most of our early letters written in the West, even as late as 1800, bear the impress of the royal arms. St. Clair, Harmar, Wilkinson, and Wayne's letters are all of this description.

PROFESSORSHIP OF PUBLIC ECONOMY, COMMERCE AND STATISTICS IN THE UNIVERSITY OF LOUISIANA.

This important department of education in our country, so much neglected in the past among us, as among others more favorably situated, first advocated in our Review in May, 1846, in an article on "Louisiana;" afterward in November, in an article on New Orleans, and elaborately in June—July, 1847; having met with high commendation in different sections of the Union, and the decided approbation of the most practical minds, as well as of many members of the Board of Administrators, with whom we have conversed—we concluded the past summer, during our stay at the North, to collect everything that could be of interest, or bear upon the subject. It is with regret that space does not admit us to introduce any of this *now*. We have, however, thought it proper in view of some immediate action, perhaps, in the matter, to re-publish at least the plan of the Professorship, and the objects intended to be embraced. The catalogue of a library we have made more complete, but omit.

PROFESSORSHIP OF PUBLIC ECONOMY, COMMERCE AND STATISTICS.

Embracing the Theoretic and Practical Departments.

I.—THEORETIC.

Origin of Society and Government; Theory, Forms, and Ends of Government; Rights, Duties, and Relations of Governments; Sources of National Wealth and Progress, and Causes of National Decline; Production, Distribution, and Consumption of Wealth, with the Laws appertaining thereto.

II.—THE PRACTICAL AND STATISTICAL.

Statistics of Population and Wealth in their application to
COMMERCE,
AGRICULTURE,
MANUFACTURES.

1. History and Progress of COMMERCE, its Principles and Laws; Home and Foreign Commerce; Tariffs, Treaties, Life Insurance, Roads, Canals, Shipping, and Revenue, Systems of Reciprocity; Balances of Trade; Mercantile and Navigation Systems; Colonies and Colonial Systems; Banks, Finances, Accounts, Transportation, Book-keeping, Principles of Merchant Law; Commerce of Nations, Ancient and Modern; Geography of Commerce, Commodities of Commerce; Literature of Commerce, etc., etc.

2. Progress and Results of AGRICULTURAL SCIENCE; Principles of Agriculture; Comparative condition of Agricultural, Commercial, and Manufacturing Communities; Statistics of Agriculture, etc.

3. Origin and Progress of the MANUFACTURING SYSTEM; its Relation to the other Pursuits; Invention and Machinery in Manufactures; Condition of the Manufacturing Classes; Statistics of Manufactures, etc.

Text-Books for the Course among others:

Locke's Essays on Government; Lieber's Political Ethics and Hermeneutics, Montesquieu's Spirit of Laws; Smith's Wealth of Nations; McCulloch's Commercial and Geographical Dictionary; Say's Political Economy; Vethake's Political Economy; Carey on Wealth; Stephen's Progress of Discovery and Maritime Commerce; Heeren's Commercial Researches; Vincent's Commerce of the Ancients; McGregor's Commercial Legislation; Annual Reports American and Contemporary Governments.

It should be required from the professorship to prepare and deliver twelve public lectures each year, free to every one, upon subjects determined in its organization. For example, upon the "*Sources of National Wealth and Decline;*" on the "*History and Progress of Commerce;*" on the "*Foreign Commercial Relations of the United States, including our Treaties;*" upon "*Finance;*" on the "*Results of Agriculture and the Advancement of Agricultural Classes;*" on "*Manufactures;*" the "*Science of Statistics;*" the "*Geography of Commerce;*" the "*Commodities of Commerce;*" the "*Literature of Commerce,*" *etc., etc.* The lectures to be of a practical character, and perhaps published eventually, under the auspices of the University, as one of its text-books, and as a work to be prized and consulted in every part of the Union. Such a volume prepared with all the light afforded in the libraries and collections of the University would be complete.

DE BOW'S COMMERCIAL REVIEW;

A MONTHLY JOURNAL OF TRADE, AGRICULTURE, COMMERCE, COMMERCIAL POLITY, MANUFACTURES, INTERNAL IMPROVEMENTS, &c.

Published Monthly, in the City of New Orleans.

Terms $5 per Annum, in advance.

Advocating the interests of the South and West, the COMMERCIAL REVIEW will not be the less mindful of the great interests of TRADE, COMMERCE AND AGRICULTURE throughout the World—Commerce in its various and multiform relations—in its History, its Laws, and its Statistics; Commercial commodities; regulations of Trade, inter-State and inter-National; Treaties; Foreign and Domestic Tariffs, Excises and Posts; Marine relations; Enterprises of Commerce, in SHIPPING, CANALS, RAILROADS and STEAM NAVIGATION, etc.; Mercantile Systems, Codes, Laws and Decisions, ancient as well as modern; Banking Insurance, Exchange, Partnership, Factorage, Guaranty, Brokerage, Bankruptcy, Wreck, Salvage, Freights, Privateering, Marque and Reprisal, Piracy, Quarantine and Custom House Regulations, etc., etc.; COMMERCIAL LITERATURE AND BIOGRAPHY.

PROSPECTUS TO THE THIRD AND FOURTH VOLUMES.

THIS work has been regularly published nearly two years. Its success has been signal throughout the whole SOUTHERN AND WESTERN COUNTRY, and its subscription list steadily and rapidly increased there and in other sections of the Union. In this brief period it has gained a larger circulation than any other Southern work, and the strongest influence. Complimentary letters and notices have been received from every source, even the very highest, as could be shown did space permit. The COMMERCIAL REVIEW has advocated and upheld the

Commerce and Agriculture of the Southern and Western States,

and exhibited from time to time their complete

STATISTICS,

in such a manner as could not but have secured the best results. The papers which have appeared upon SUGAR and upon COTTON, upon TOBACCO and RICE, and MANUFACTURES, upon THE PROGRESS OF OUR COMMERCIAL RELATIONS with all nations, and upon MEXICO, may be stated as examples. Indeed, this has been admitted from many sources. Although devoted in its aims to the development and exhibition of the

Resources of the South and West,

the Commercial Review neglects no view of

American and European Industry and Enterprise,

in every department, and must be of equal value to AMERICAN CITIZENS wherever they are found. Is there a section of the union, too, or an interest which has no concern with the progress and resources of the GREAT WEST, of which the Commercial Review is the faithful exponent?

DE BOW'S COMMERCIAL REVIEW FOR 1846.

VOLS. I AND II.

PRICE $5—*In one handsome large octavo volume, beautifully bound, embellished with an engraved frontispiece of the City of New Orleans.*

SPLENDID EDITION IN TWO VOLUMES—EXTRA BINDING $6.

We announced in our September number, that the reprint of this work was in progress, and have now the pleasure of announcing its completion and readiness for delivery. The style of finish and execution is admirable. As the numbers for 1846 have great value, and were much sought, and as we have not been able to furnish them for many months back to the frequent and numerous orders received, this republication must pass through a very large edition. We have had it stereotyped.

Orders for the work should be sent in without delay. It will be furnished with the utmost dispatch, and by the first opportunity; or through the mail, if requested—as the postage will not exceed 50 cents.

As we have many hundred subscribers who *began receiving the work the second year, without being supplied with the first*, we take the liberty of suggesting the importance of having COMPLETE SETS FROM THE BEGINNING of a publication, intended at all times for reference upon every important point connected with the

COMMERCE, AGRICULTURE, AND MANUFACTURES

of the Southern and Western States, as well as of the Union. The references are continual from one volume to another.

To others than subscribers we commend the work, assured that as an independent volume, it will be found a valuable addition to the library of every citizen desiring not to be ignorant of the practical affairs of his country.

The statistics of the South and South-west have never before been so thoroughly collected and published.

Upward of eighty original contributions are to be found in the volume, from the pen of the Editor, Hon. Joel R. Poinsett, Robert Greenhow, author of History of Oregon, Hon. B. F. Porter of Alabama, J. P. Benjamin, and E. J. Forstall of New Orleans, Professor Riddell, and a large number of other able writers—besides innumerable minor papers, tables, statistics, etc., upon manufactures, commerce, agriculture, etc.—a catalogue of which will be furnished to any one desiring it.

VOL. III. OF COMMERCIAL REVIEW: JANUARY—JULY, 1847.

Bound in splendid style, ready for delivery, with an engraving of the Balize, at the mouth of the Mississippi.—PRICE $3.

Vol. IV. will be ready for delivery on the 25th of the present month, embellished with A STEEL PORTRAIT OF STEPHEN GIRARD, the first of a series of AMERICAN MERCHANTS.

BINDING.

Subscribers in the city or country, who will send in their numbers at the end of the year or volume, without expense to us, in good order and condition, will have handsome bound volumes delivered in return, without any delay, by remitting us post-paid, the sum of One Dollar for two volumes; the absolute cost of binding. Should any numbers be missing, they will be supplied at subscription price. It is our wish that every subscriber be supplied with bound editions, which, if done in our office, will be *uniform*.

B. F. DE BOW, *Publisher, New Orleans.*

COMMERCIAL REVIEW AND UNIVERSITY PRESS.

TO MERCHANTS, LAWYERS, AND OTHERS.

This extensive office, collected and purchased at the North, by the Editor of the Review during the past summer, is now prepared to execute all orders in the printing and publishing business,

IN EVERY VARIETY OF STYLE AND EXECUTION.

A large Adams' Power Press is employed, performing such work as is now exhibited in the Review.

The office is furnished with every kind of PLAIN, FANCY, AND ORNAMENTAL TYPE, particularly FIGURES, for executing tabular work with neatness.

BOOKS, PAMPHLETS, CIRCULARS, CARDS, LAW BRIEFS AND FORMS, BLANKS, BILLHEADS, SHOWBILLS, and every other variety of

MERCANTILE, COMMERCIAL, OR LAW PRINTING,

executed with the utmost dispatch, and on terms as low as any other office in the city.

☞ Orders from any part of the interior executed with dispatch, and on satisfactory terms orders being solicited, directed to the office of the Commercial Review, or to

B. F. DE BOW, *Publisher, New Orleans.*